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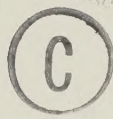
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THE UNIVERSITY OF ALBERTA

NEW DIMENSIONS FOR EDUCATING
VOCATIONAL EDUCATION STUDENTS
AT THE SECONDARY SCHOOL LEVEL

BY



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A THESIS

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ABSTRACT

The intent of this study was to describe the changes that were implemented to obtain the goals of vocational education as interpreted by the staff, students and administration of St. Joseph Composite High School in Edmonton, Alberta. St. Joseph Composite High School was chosen because it accommodates almost all of the vocational education programs offered by the Edmonton Catholic School System.

Studied were six broad areas involving system and school philosophy, the examination of the needs and aspirations of the students enrolled in vocational education courses, the determination of community needs as related to vocational education, the determination of the adequacy of vocational education programs as previously and presently offered, an examination of the adequacy of facilities, and suggested steps and procedures to be followed to meet evident needs.

Data were gathered from September, 1971, to the present. The investigator was an administrator in charge of vocational education programs at St. Joseph Composite High School and was directly involved in all aspects of change. Data included printed literature, school records, minutes of the Edmonton Catholic School Board, personal contact with staff, students and members of the business community and personal observations of the process of change.

An examination of data revealed a broad range of views, opinions and reactions to the many questions relating to vocational education. In summarizing the findings and in attempting to develop specific recommendations, it became apparent that several specific areas of concern were recurrent. The prime and most urgent concern was the

need to re-examine and restructure the vocational education courses so as to ensure a greater emphasis in the skill and practical aspects as well as developing a relevant academic program of studies.

In consideration of this major concern of the study, the following is a review of the action taken to date.

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Chapter 1

INTRODUCTION

The advent of vocational education into Canada's secondary schools occurred with the passage by the federal government of the Technical Education Act of 1919. In this Act a cost-sharing arrangement was detailed between the provinces and the federal government whereby financial assistance was provided for the following uses:

1. purchase or rental of land, buildings, furnishings and equipment;
2. remuneration and travelling expenses of persons employed for the purpose of administration of vocational education and all expenses incidental to such administration;
3. remuneration of teachers employed to conduct vocational classes;
4. maintenance of plant and equipment.

From 1920 to 1962 many vocational education programs were curtailed, others operated at a reduced rate and very limited new ventures in vocational education were attempted or undertaken by provincial governments.

The greatest impetus for vocational education in Canada's history was provided in 1961 with the passage of the Technical and Vocational Training Assistance Act. Events occurring nationally and internationally made the passage of the Act both desirable and necessary. At the time Canada was experiencing a high rate of unemployment coupled with a rather severe economic recession and the Russians had

successfully launched Sputnik which had raised some very serious doubts concerning the quality and relevance of the nation's educational system. The Act served a two-fold purpose insofar as secondary schools were concerned. Youngsters were encouraged and persuaded to remain in school and off the glutted labor market and those who were leaving the secondary schools were to be provided with some form of saleable skill.

Following an initial flurry of interest and what could be termed as preliminary successes, it became readily apparent that the educational establishment had failed to implement viable and enduring vocational education programs at the secondary school level. Whether by intent or by design, the direction and philosophy that vocational education programs had taken were not consistent or in harmony with the goals and objectives of the Technical and Vocational Training Assistance Act. The concept of providing students with saleable skills was abandoned by some school administrators and in some instances the vocational education facilities and teaching staffs were relegated to providing a custodial function for the less able and more difficult to handle students. The term "dumping ground" became and remains solidly entrenched in educational jargon when referring to vocational education programs of studies.

Other societal events and conditions were in part also responsible for the declining interest in vocational education. The return to a buoyant national economy had a ripple effect and caused a subsequent decline in unemployment. The federal government, in 1967, discontinued the cost-sharing agreement for vocational education with the provinces. The trade union movement, fearful of an over-abundant

skilled labor pool reluctantly and cautiously welcomed the graduates of vocational education programs. In some extreme and isolated cases open hostility was evidenced between union members and students sent to the job sites by the school authorities.

The Government of Alberta, in 1971, set as one of its top priorities the industrialization of the province. A major stumbling block in the industrialization process is the acute shortage of skilled manpower which will remain as a major problem far into the foreseeable future. There remains little doubt that viable vocational education programs at the secondary school level can contribute significantly to the skilled manpower needs of the province.

The failure of vocational education at the secondary school level to meet the goals and objectives as stated in the Technical and Vocational Training Assistance Act raises some crucial issues concerning education in general and vocational education in particular. Constitutionally the federal government is excluded from intervention into education which is under the jurisdiction of the province. Details concerning this are discussed in Chapter 2 under the terms and conditions of the British North America Act of 1867. The federal government's role in education has traditionally been and remains limited to providing funding for certain types of programs; in this case, support for vocational education programs in the secondary schools. Even though the federal government had specifically stated the goals and objectives of vocational education within the Act, it lacked the authority necessary to assure the achievement of the stated goals and objectives. The provinces, who disbursed the funds to the educating

agencies and who retained jurisdiction over educational matters were not bound to achieve the goals and objectives which were promulgated by the federal authorities. The issues in this matter become fairly obvious. Should programs such as vocational education be centralized and controlled by a federal body, or should they be decentralized? If they are to be decentralized, to what level should the decentralization go - to the locally elected school board trustees, or to the experts in the field?

Constitutionally, the responsibility for education programs has rested with provincial bodies who traditionally, within certain guidelines, decentralized the authority to the elected school boards. They in turn delegated the responsibility and authority to subject area specialists who developed and modified curricula according to local and community needs and resources.

During the last few years, this trend has begun to reverse and the Alberta Department of Education has begun to take on a much greater role in curriculum matters, especially in the area of vocational education. A typical example of this is discussed in Chapter 3 when dealing with Harder's Industrial Education Matrix. Curriculum plays a vital role in determining the desired outcomes of education, and in this particular instance a curriculum and an implementation plan were clearly at cross-purposes with the needs, desires and wishes of a local school unit.

The writer, although having a personal bias towards decentralization, does not wish in this study to pass judgment on the issue of centralization vs. decentralization. However, an awareness of this

problem is necessary when one seeks to make change that does challenge the status quo. This study attempts merely to identify the issues and to describe the actions that were taken to offer vocational education programs that would meet the needs of the students of the Edmonton Catholic School System in harmony with the needs of business, industry and the local community.

Another issue, closely allied to the question of the rights of local school boards and mentioned in the British North America Act, is the right of religious bodies such as Catholics to organize school districts for the education of their children. Although Catholic education has in the past been mainly in the area of the liberal arts, Catholic philosophy supports the concept of vocational education and some of the earliest intrusions into the field of vocational education in Canada has been under the auspices of the Catholic church, as documented in Chapter 2 of this study.

Information disseminated by Alberta Education show that there are 39 secondary schools within the province that offer a total of 319 courses of studies in vocational education. These courses of studies are listed in the High School Handbook under the title, "Industrial Education". Unfortunately, the time allotted by Alberta Education to these 319 industrial education courses has been so drastically reduced to practically render them as non-viable vocational education courses.

Because of its concern that vocational education was not meeting the needs of business and industry and, as a consequence, was far less meeting the needs of its students, the Edmonton Catholic School Board authorized that an alternate form of vocational education be

designed and implemented as a pilot project within one of its high schools.

The program that was to be designed was to have the following points of emphasis: to reestablish the purpose and delivery system of vocational education programs so that these programs would ensure greater emphasis on the practical and skill training aspects as well as the relevance of academic skills.

One of the major issues that remains to be dealt with is in the area of funding for vocational education programs. The federal government withdrawal of funding for vocational education has left this responsibility to the provincial government. Unfortunately, monies in the form of provincial grants, that have been earmarked specifically for vocational education programs rarely reach the vocational education classroom level in their entirety. Local school boards receive these grants from government and place them into their general revenue. From that point on, budgeting allocation rarely, if ever, recognizes the original purposes of those monies. No two school boards use the same budget allotment formula when providing operational monies for vocational education programs and the disparity between funding for individual programs from school district to school district is nothing short of scandalous. Furthermore, abuse is evidenced at the local school level when vocational education monies are used for purposes not remotely connected to vocational education. Some recognition is given to this problem in the new dimensions in Chapter 6, when mention is made of tying provincial grants to credit enrolment units.

Numerous issues would appear to surface if one were to

critically examine the Pre-Employment Skill Training Program made mention of in Chapter 3. Some of these issues would involve the entire structure of The Alberta Teachers' Association with regard to the determination of the qualifications of personnel engaged in the profession of teaching. Since this proposal was not seriously considered, there is no need to critically examine the issues connected to this proposal.

Most of these issues that have previously been mentioned have been resolved either partially or fully, in the new dimensions in vocational education. Any change from tradition seems to raise new issues which have to be resolved. It is the responsibility of the party or parties initiating change to be aware of this fact and to structure changes in such a manner so as not to raise issues which are unnecessary or meaningless to the goals and objectives which are to be realized. Fear of resolving issues, or refusal to initiate necessary change because of fear of the unknown is tantamount to denying the existence of any goals and objectives. Perhaps change in education occurs only because fools rush in where angels fear to tread.

PROBLEM STATEMENT

The main purpose of this study was to describe the new dimensions in vocational education which are being used in the education of vocational education students in a large inner-city composite high school under the jurisdiction of the Edmonton Catholic School Board.

OBJECTIVES OF THE STUDY

The main purpose of this study was to describe the new

dimensions in vocational education that were implemented in a large inner-city composite high school. In addition to describing the new dimensions, this study had the following secondary objectives:

1. To describe the predominant areas of change that influenced the implementation of the new dimensions in vocational education.
2. To describe the conditions and events, both internal and external to the model school, that existed prior to and during the period of the implementation of changes.
3. To describe the reorganization of the curriculum in relation to achieving the goals and objectives as viewed by the administrators and vocational education teachers within the model school.
4. To describe the reorganization of the administrative structure within the model school in relation to achieving the goals and objectives of the new dimensions in vocational education.

NEED FOR THE STUDY

There is little doubt that vocational educators and school administrators in Alberta and throughout Canada are seeking ways and means of improving the total delivery system of vocational education. A study that would describe new dimensions in vocational education, one that is presently being implemented, may make a contribution to the background of those individuals who desire to change, in whole or in part, vocational education programs in the secondary schools.

The new dimensions in vocational education that are described in this study are not necessarily a cure-all for vocational education programs within other school districts or other schools. The model school in this study is a large inner-city composite high school with a student population of readily identifiable ethnic backgrounds, the parents of whom have a strong commitment and rigid adherence to the work ethic. The new dimensions in vocational education at the model school had the support of the parents and the local community and this fact, no doubt, is of considerable consequence when measuring the success of the vocational education programs within the model school.

Educators for many years have stressed the importance that education should strike a harmonious balance between the affective, cognitive and psychomotor domains of learning, if education is to achieve the goal of developing learners to their fullest potential. If this balance is to be achieved, it is essential that each student be offered a program that is balanced between vocational education and academic education. This program should be such that each form of education is supportive of and reinforces the other to maximize the personal, social and emotional potential of the individual student. Vocational educators readily acknowledge that shortcomings do exist in vocational education and that the development of an alternative delivery system for vocational education should be of vital concern to the various publics that this form of education serves.

To describe the new dimensions in vocational education with its attendant successes and failures may provide invaluable information and an awareness of problems that other vocational educators may encounter

should they want to institute similar form dimensions in vocational education. This kind of information may be useful to other educators by providing them with a rationale for change and providing them with direction to initiate that change.

SIGNIFICANCE OF THE STUDY

The results of this study may be of particular interest to educational administrators who through their role as leaders in the educational community can influence and initiate changes in educational delivery systems. Too often vital information concerning new trends in vocational education is not published in the literature that is available to interested vocational educators.

A significance of the study was to describe the new dimensions in vocational education that have been implemented in a large high school in the City of Edmonton. From studying these new dimensions, much valuable information and assistance may be provided to other interested secondary school educators. A description of this program of vocational education with its successes and failures may provide invaluable information and an awareness of problems that other vocational educators may encounter should they want to institute a similar form of vocational education. This kind of information may be useful to other educators by providing them with a rationale for change and providing them with direction to initiate that change.

This study may be significant in that the results of the study may provide a base for further research on any one of the components that comprise the new dimensions in vocational education.

Finally, the results of a study such as this may provide in small part some answers to the social and economic problems of the Province of Alberta and Canada as a whole. As a healthy, expanding economy continues to require an abundance of skilled jobs, too often individuals needed to fill these jobs lack the necessary skills and education to carry out the job functions that a skilled worker must fulfill.

LIMITATIONS OF THE STUDY

This study had the following limitations:

1. It was limited to a description of the new dimensions for vocational education that were implemented by the administrators and teaching staff of a large inner-city comprehensive high school under the jurisdiction of the Edmonton Catholic School District.
2. It was limited to the information that was available on this type of vocational education.
3. Any information used in this study was limited to the model school where development and changes to accommodate the new directions for vocational education were taking place.
4. Insofar as the new dimensions for vocational education have been offered in the model school for a limited time, the study was limited to the time frame of 1972-76.
5. Administrative, staff and student bias may have resulted in a "Hawthorne effect," affecting the validity of the results of in-house research.

DEFINITION OF TERMS

The definitions listed below are the working or operational definitions of the school. They have been compiled from school literature and from information provided by school staff and administrators. The definitions apply to this study.

Vocational Education Program

The term vocational education program that is used at the model school refers to those programs on the curriculum that are skill-based and are intended to provide the student with saleable skills to permit the student to enter direct employment, to enter into apprenticeship or to continue studies at a post-secondary institution. All programs in this category qualify for vocational education grants from Alberta Education.

Associated Studies Program

Four compulsory academic subjects which are required for a high school diploma and are offered in a manner in which these subjects directly relate to the occupational field of a particular vocational education program. The subjects included are: language arts, humanities, applied mathematics and applied science. Each of these subjects are described in detail in a subsequent section of this report.

Cooperative Education

Industry and business have seen fit to cooperate with the model school to enhance vocational education programs of the school. On-going, paid employment is provided to students as an integral part of their

vocational education programs. The jobs selected for cooperative education relate directly to the vocational education curriculum that is offered in the school.

Continuous Program

Students are permitted to move from one unit of study to the next without restrictions based on time, age or grade level.

Independent Study

The student is allowed the opportunity to work alone on various learning units independently of other members or the class. This study can be done in the study room, in the library or in the shop area.

Block

That portion of the school day which the student spends in an academic classroom or in a vocational education laboratory. A block consists of 80 minutes of time.

All Day Program

The all day program is that portion of time that the student is in school. This consists of three or more blocks of 80 minutes each.

ASSUMPTIONS

For the purpose of this study the following assumptions were made:

1. The information gathered from a review of the literature, the results of questionnaires and interviews was substantively accurate and representative enough to formulate conclusions and recommendations.

2. The major elements of the model program are identifiable and can be accurately described as an operational model.
3. The major elements of the model could be categorized into areas which could be evaluated or could provide identifiable topics for further research.
4. The model vocational education program that is described is the only one of this nature that has been implemented in a secondary school in Alberta.

METHODOLOGY

The following methodology was used to collect information that was used to write the report which is a description of "New Dimensions for Educating Vocational Education Students at the Secondary School Level."

A survey of publications devoted to vocational education as well as the standard indexes devoted to educational research was made. The purpose of this survey was to determine if vocational education programs similar to the one "in-place" at St. Joseph Composite High School were offered in North America.

Extensive use was made of the results of psuedo-in-house research to determine the viewpoint of students and staff concerning vocational education programs. Use was made of the results of research investigations that were conducted by central office personnel.

The results of "Vocational Education for Tomorrow," the Hiebert-Ritter report, were to show the viewpoints of vested interest groups such as: students, parents, staff, business and industry, and

politicians concerning vocational education.

A review was made of correspondence received from central office to determine which correspondence had implications for this study.

A review was made also of internal communications of the school to determine the relationship that memoranda and other written correspondence had for this report.

Minutes of meetings that recorded the proceedings of vocational education staff meetings were reviewed for pertinent information for this report.

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Chapter 2

THE DEVELOPMENT OF VOCATIONAL EDUCATION

An Historical Overview

Vocational education has for many years been recognized as a legitimate and proper function of education. Its history in Canada can be traced to the birth of the nation. Early records, dating back to 1668 indicate that Bishop Laval opened the nation's first trade schools in St. Joachim and Quebec City. In keeping with the state of technology of that time, elementary instruction in these schools was offered in agriculture, cabinetmaking, carpentry, masonry, roofing, shoemaking, and tailoring. A school in Beaupre offered vocational instruction to girls, although programs were very limited in scope and included such household skills as spinning and weaving (Phillips, 1957, p. 19).

The first provincial governmental involvement, primarily in the area of financial assistance for vocational education, occurred in 1876, when the Government of Ontario provided a one thousand dollar grant to the Toronto School of Art. The school was not officially recognized by the Provincial Department of Education until 1880.

The Northwest Territories which in 1880 included the areas which presently comprise the provinces of Alberta and Saskatchewan, did not record any activity to finance vocational education. It was not until four years later, in the year 1884, that an industrial school for Indians was established in the Qu'Appelle Valley in what is now Saskatchewan (Jameson, 1955, pp. 19-22). That same year the Northwest Territorial Council established the first protestant public school district

in what is now Alberta.

In the following year, 1885, two additional industrial training centres intended to serve the Indian population were established by Catholic missionaries at Prince Albert and Moose Mountain. The vocational education curriculum was limited to agricultural occupations. During the same year the Northwest Territorial Council passed the School Ordinance Act, the purpose of which was to establish government controlled schools which would offer a suitable curriculum to the native population and the immigrants who were arriving from Europe and the United States of America. Under the terms of this Act a program of studies was adopted in 1888 which introduced bookkeeping and accounting into the school curriculum.

British North America Act (1867)

It is of particular interest to note that the federal government played an insignificant role in education until after the turn of the century, despite the fact that the education question had been written into Section 93 of the British North America Act. Education is nominally and normally under the jurisdiction of the province, but in certain circumstances the federal government is given a power of intervention. The Act is of particular significance to the Edmonton Catholic School District insofar as it deals with the rights of denominational schools. Section 93 of the British North America Act states:

93. In and for each Province the Legislature may exclusively make Laws in relation to Education, subject and according to the following Provisions:-

1. Nothing in any such Law shall prejudicially affect any Right or Privilege with respect to Denominational Schools which any Class of Persons have by Law in the Province at the Union:

2. All the Powers, Privileges and Duties at the Union by Law conferred and imposed in Upper Canada on the Separate Schools and School Trustees of the Queen's Roman Catholic Subjects shall be and the same are hereby extended to the Dissident Schools of the Queen's Protestant and Roman Catholic Subjects in Quebec:
3. Where in any Province a System of Separate or Dissident Schools exist by Law at the Union or is thereafter established by the Legislature of the Province, an Appeal shall lie to the Governor General in Council from any Act or Decision of any Provincial Authority affecting any Right or Privilege of the Protestant or Roman Catholic Minority of the Queen's Subjects in relation to Education:
4. In case any such Provincial Law as from Time to Time seems to the Governor General in Council requisite for the due Execution of the Provisions of this Section is not made, or in case any Decision of the Governor General in Council on any Appeal under this Section is not duly executed by the proper Provincial Authority in that behalf, then and in every such Case require, the Parliament of Canada may make remedial Laws for the due Execution of the Provisions of this Section and of any Decision of the Governor General in Council under this Section.

The education clause in the Alberta Act under which Alberta entered the Canadian federation remained substantially the same as Section 93, paragraph 1 of the British North America Act but included some terms of the School Ordinance Act of the Northwest Territories.

17. Section 93 of the British North America Act, 1867, shall apply to the said province, with the substitution for paragraph (1) of the said section 93, of the following paragraph:-

1. Nothing in any such law shall prejudicially affect any right or privilege with respect to separate schools which any class of persons have at the date of the passing of this Act, under the terms of chapters 29 and 30 of the Ordinances of the Northwest Territories, passed in the year 1901, or with respect to religious instruction in any public or separate school as provided for in the said ordinances.
2. In the appropriation by the Legislature or distribution by the Government of the province of any moneys for the support of schools organized and carried on in accordance with the said chapter 29 or any Act passed in amendment thereof, or in substitution therefore, there shall be no discrimination against schools of any class described in the said chapter 29.

3. Where the expression 'by law' is employed in paragraph 3 of the said section 93, it shall be held to mean the law as set out in the said chapters 29 and 30, and where the expression 'at the Union' is employed, in the said paragraph 3, it shall be held to mean the date at which this Act comes into force (Revised Statutes of Canada, p. 99).

The basis had been established for the role of the federal government concerning education and it is significant to note in ensuing legislation that the province diligently exercised its control over education and, except in extreme national emergencies, the role of the federal government was limited to the area of financial support.

Alberta Becomes a Province

At the turn of the century, 1905, when the Northwest Territories were partially divided into the provinces of Alberta and Saskatchewan, an increased interest in vocational education developed.

Royal Commission on Industrial Training and Technical Education

In 1910, the federal government turned its attention to youth in school and adults in the labor force when it established a Royal Commission on Industrial Training and Technical Education. This Commission was chaired by Messrs. MacDonald and Robertson, who were responsible for influencing the first systematic experiment in vocational education in Canada. The Commission was given the mandate to draft a workable agreement with the provinces for the implementation of effective and workable training programs that were primarily agricultural in nature. As a result of the work of the Commission, 21 training centres were established across Canada. One of these centres was the Provincial School of Agriculture at Calgary which was officially opened in 1913. Another result of the work of the Commission was that it set the

parameters for all future federal-provincial negotiations related to education, when it established the following principles:

1. It should be under provincial control and regulation;
2. It should receive support from individuals, from local authorities, from provincial and federal governments;
3. Provision should be made for active participation in its control, management and direction by individuals in the locality who would represent industries as employers and employees, agriculture, women's occupations, particularly housekeeping, business and organized education;
4. It should provide educational opportunities for those who have gone to work and also for those who are able to return and devote their time for some months or years, as the case may be, to a course or courses of training;
5. It should make provision to ensure as far as practicable, equality for all preparing for industrial, agricultural and housekeeping occupations and for workers in such occupations;
6. It should be carried on in cordial cooperation with existing systems of education and in such a way as to have advantage of the use of existing buildings, equipment and teaching staff so far as these may be suitable and available (Glendenning, 1968, p. 5).

Before the completion of the Commission's study, financial assistance was provided to the provinces under the terms and conditions of the Agricultural Aid Act of 1912 and the Agricultural Instruction

Act of 1913. Alberta took advantage of these federal funds and established at Olds and at Vermilion, Schools of Agriculture. It is significant to note that these two pieces of federal legislation were the first major federal Acts to make provision for the financial support of vocational education. The Provincial Government of Alberta took advantage of the funds under this Act and in the following year, 1914, saw the establishment of the Institute of Technology and Art at Calgary.

The responsibilities, duties and roles of both the provincial and federal governments with regard to vocational education were more clearly defined in the Technical Education Act of 1919. Though this Act excluded certain age groups as well as religious and private schools from receiving financial support, the Act did specify a set formula for granting financial assistance to the provinces for the following purposes:

1. Purchase or rental of land, buildings, furnishings and equipment;
2. Remuneration and travelling expenses of persons employed for the purposes of administration of vocational education and all expenses incidental to such administration;
3. Remuneration of teachers employed to conduct vocational classes;
4. Training of teachers for vocational work;
5. Maintenance of plant and equipment (Technical Education Act, 1919).

The responsibility for providing vocational education offerings

in the secondary schools of the nation was left almost entirely to the provinces during the ensuing years. In these years the federal government served only in an advisory capacity. Federal authorities retained the right to withhold financial support in cases where prescribed regulations of the Act were not adhered to. There is evidence to suggest that some of these monies were less than wisely spent and support was provided for programs that were non-vocational in nature. The Province of Alberta did, however, make use of the available federal financial assistance and did establish vocational and pre-vocational schools during the period from 1919 to 1926. The provincial government also introduced manual arts as a recognized course of studies into the high school curriculum in 1926.

At the turn of the century, the Unemployment and Agricultural Assistance Act of 1937 had a slight impact upon Alberta. The province saw fit to implement a limited number of apprenticeship programs for the unemployed. These apprenticeship programs were established cooperatively with industry whereby on-the-job instruction was provided. Concurrently, the manual arts program was introduced into the junior high school curriculum (Glendenning, 1968, pp. 28-30).

Two years later, in 1939, the Youth Training Act was passed. The purpose of this Act was to prepare the nation's labor force for war-time conditions and programs approved were fully funded by the federal government. The National Forestry Program was also introduced in 1939.

During the following years additional federal legislation such as the War Emergency Training Act of 1940 was passed. This Act had

minimal impact upon the educational sector, particularly the secondary schools of the country. The Vocational Training Coordination Act of 1942 did, however, have a delayed impact upon the secondary schools.

In 1945, the Vocational Training Coordination Act was expanded and given a new title: Vocational Schools Assistance Agreement. Under the Vocational Schools Assistance Agreement both the federal and the provincial governments equally shared the costs of vocational education courses in both the secondary schools and non-university post-secondary institutions. This Agreement originally was to terminate in 1957 but was extended with modifications to 1962.

Technical and Vocational Training Assistance Act, 1960

The greatest impetus to vocational education in the history of Canada, and particularly in the Province of Alberta, was ushered in with the passage in Ottawa of the Technical and Vocational Training Assistance Act of 1960. Plagued by a decline in Canada's exports in the world market, rising unemployment and criticized for a lack of a skilled labor force, the federal government in 1959 named a Commission to study these national problems and recommend solutions.

The study of the Commission concluded that vocational education should be implemented in all provinces by a shared financing arrangement between the federal and provincial governments. The rationale for the support of vocational education is recorded in the opening paragraphs of the Technical and Vocational Training Agreement of 1960:

Whereas the Technical and Vocational Training Assistance Act authorizes the Minister of Labour, with approval of the Governor in Council, to enter into an agreement with any province, for a period not exceeding six years, to provide for the payment by Canada to the province of contributions in respect of the costs

incurred by the province in undertaking programs of technical and vocational training and in providing training facilities.

Whereas the rapidly-changing technology of industry and business is increasing the Canadian economy's requirements for trained manpower of all kinds.

And Whereas the continued growth of the Canadian economy, and the welfare of all Canadians, is dependent on the effective development of the skills and knowledge of the labour force.

And Whereas there is an urgent requirement for the development of training opportunities for workers now in the labour force as well as for youth who will be entering employment.

And Whereas since industry makes an important contribution to the development of manpower skill, the provinces and the Federal Government should encourage and stimulate cooperative training programs with industry.

And Whereas the purpose of the Technical and Vocational Training Assistance Act is to provide assistance for the development and operation of programs for the training of Canada's manpower.

The Government of Alberta was one of the early participants of the Agreement and it encouraged local school boards to study the feasibility of providing vocational education programs at the high school level as provided for within the terms and conditions established in the Agreement (1960):

1. Vocational High School Training Program (V.H.S.) Program 1.

This program covers those courses, given as an integral part of high school education, in which at least one-half of the school time is devoted to technical, commercial and other vocational subjects or courses designed to prepare students for entry into employment by developing occupational qualifications. It may also include courses which provide students with an essential basis for further training after leaving regular high schools in accordance with regulations in Schedule 1.

The Federal Government will contribute to the operational costs of such programs and courses up to a total of \$15,000,000 to all provinces and territories during the six-year period April 1, 1961 to March 31, 1967 subject to the following conditions:

- (a) The annual contribution of the Federal Government shall not exceed \$3,000,000 in any one fiscal year.

(b) The annual allotment for each province or territory shall be determined as follows:

(1) an initial allotment of \$30,000 to each province and \$20,000 to each of the Yukon and Northwest Territories; plus

(a) Basic training for skill development in such subjects as mathematics, science, and communication skills,

(b) Apprenticeship, or

(c) Retraining of employees who would otherwise be displaced because of technological or other industrial changes.

All such programs to be established and operated in accordance with the regulations of Schedule 4.

THE DEVELOPMENT OF VOCATIONAL EDUCATION

IN THE EDMONTON CATHOLIC SCHOOLS

Purpose of the School System

The Edmonton Separate School District was established by the Catholic residents of the City to provide an education for their children which is in harmony with the Catholic Christian philosophy. Each school in the district, therefore, attempts to reflect the highest ideals of Catholic education which has, as its mainstay, recognition of the following two points:

- (a) That each individual has been created by God as a unique person for a specific purpose -- life is not meaningless -- it has a purpose;
- (b) That the primary purpose of education is to assist the child to develop all his faculties to their maximum potential -- physical, moral and intellectual -- so that he may live the message of Christ as a committed Christian (Administrative Regulations Handbook, January, 1971).

Objectives of the Edmonton Catholic Schools

It has always been recognized by the Edmonton Catholic School System that all children are different, possessing different abilities in varying degrees and that regardless of these differences, each child has worth as an individual and has the right to pursue the kind of education best suited to his or her individual abilities and aspirations. Although every effort has been made in the past to provide a variety of programs at the secondary school level, limited financial resources prevented the offering of vocational education courses other than those which had been offered in the field of business education.

Facilities for Vocational Education

It was not until 1960 when the province and the federal government signed the Federal-Provincial Training Agreement that sufficient funds became available for the Edmonton Separate School Board to offer a wide range of vocational education programs in its secondary schools. Recognizing the need for vocational education programs at the secondary level, and in keeping with its philosophy, the Edmonton Catholic School System became the first school district in the province to participate under the terms and conditions of the Technical and Vocational Training Agreement. Funds from this Agreement provided for addition of a vocational education wing to be added to St. Joseph Composite High School (Project 11-B-1). The vocational wing of this school was completed in the spring of 1962 and provided space for a fairly extensive range of vocational education courses to the students of the school system. The courses that were offered included: automotives, building construction, commercial art, drafting, electricity, electronics, food services,

lithography, and pipe trades. Subsequent to this, business education facilities were added to seven of the high schools of the system, although only four of these high schools, including St. Joseph, qualified for federal assistance under the terms of the Agreement.

Special Education

The special education of the system was initiated in 1967 and was a specifically designed program for students who had encountered difficulties with their regular school program of studies and whose strengths lay in psychomotor domain of learning. This program attempts to have the student regain self-confidence by providing areas of study in which the student's special interests and abilities will allow the student to succeed and gain a sense of accomplishment and personal worth.

On September 15, 1965, recognition of need was approved by the Board of Trustees for an additional extension to be added to St. Joseph Composite High School for the implementation of an academic-vocational program for special vocational education students. This extension was completed in 1967 when eight shop areas in addition to classroom space were made available.

The students enrolled in the special vocational education program of study select four 5-credit exploratory vocational education courses during the first year of high school, Grade 10. Upon successfully completing these courses the student has the option of enrolling in an in-depth vocational education program for the remaining two years of high school, Grades 11 and 12.

It is of interest to note that the special vocational education

program was an outgrowth of an experiment in pre-employment education that was conducted with 22 students at St. Basil School in 1958. The success of the St. Basil program was such that it justified its continued existence. In addition, this program was also adopted by other school jurisdictions throughout the province.

VOCATIONAL EDUCATION 1961-1975

Demographic Information

St. Joseph Composite High School is a large inner-city school with a student enrolment that fluctuates between 2,000 and 2,200 students. The programs of studies in this school are semestered and the school serves students from the immediate local community, in addition to serving students from the entire City of Edmonton plus a considerable number of students from suburban areas that are coterminous to the city. The teaching staff of the school comprises approximately 100 teachers. The school is administered by a principal and four assistant principals. Each assistant principal is responsible for the operation of one of the following program of study: academic, business and general, technical-vocational, and special education.

Technical-Vocational Section

The vocational education program of studies at the school has undergone a series of locally initiated name changes. When the program was first brought into the school in 1963, the name Vocational Education Section was adopted to refer to that part of the school where vocational education courses were offered. In 1967, when a new addition was added to the school primarily for special education purposes, it was referred

to as the Special Education Section and occasionally as the Special Vocational Section. By 1968, the words "Special Education" were dropped and the section became known as Special Vocational. Needless to say, some confusion was encountered, particularly by students and parents, when attempting to distinguish between special vocational and vocational education and the problem became more apparent when the word "Special" was dropped entirely. The teachers of the Vocational-Education Section met in the spring of 1969 and requested of the administration that the school formally adopt the name Technical Section when referring to the vocational education programs of the school. The name Technical Section remained in force until the end of the 1970-71 school year. At that time the school administrator in charge of the vocational education programs requested of his staff that a more suitable name be selected for the section of the school where vocational education programs of studies were taught. As a result, the term Technical-Vocational was agreed upon by these vocational education teachers and this term has been in use since that time. According to common dictionary usage, technical refers to having to do with a mechanical or industrial art or applied science, while vocational refers to having to do with some trade or occupation. Considering the direction and purpose that vocational education programs of the school would take, the vocational education teachers agree that the Technical-Vocational Section is an appropriate name for this section.

The technical-vocational programs of studies comprise 15 vocational education courses that are offered exclusively to Grade 11 and Grade 12 students. All students are required to complete a regular

Grade 10 program of studies before they are registered in the vocational education section. This approach is used to force the students to defer concentrating on a particular vocational education program of studies to the latter part of their school career.

A number of vocational education courses such as horticulture, television crafts and health services were developed by staff of the Edmonton Catholic School System in cooperation with representatives from business and industry. These courses were approved by Alberta Education as credit courses in vocational education. Credits may be defined in terms of time. Regulations of Alberta Education require that for a student to earn one credit, the student must receive a total of 25 hours of instruction time or be engaged in other activities that are directly related to a course. Typical vocational education courses that are offered at St. Joseph Composite High School necessitate that the student is held accountable for 500 hours of instruction or related activities in order to earn 20 credits.

Technical-Vocational Education Staff (1977)

The present technical-vocational education staff at the school is comprised of 31 individuals; 23 of whom are certificated teachers and eight are instructional aides. All vocational education teachers possess journeyman or equivalent certification. In addition, teachers of the technical-vocational education staff have a Bachelor of Education degree and four of these teachers have a Master's degree.

The broad range of trade and/or industrial experience of this group of teachers has made a marked contribution to the philosophy of

the school and its teachers. All of these teachers are actively involved in professional development, some at the leadership level with the specialist councils of The Alberta Teachers' Association or working with members of the business or industrial community to keep their programs at a level that will provide their students with the latest in industrial developments.

Enrolments

Since the inception of vocational education courses in 1963, enrolments in these courses have shown steady growth both in actual numbers and in the percentage of students eligible to enroll in these programs. Based upon school records and information from the Provincial Department of Education, the shop utilization rate for vocational education facilities at the school had been in excess of 100 percent. To compute the shop utilization rate, use was made of a special formula. This formula was first used in 1974. Data in the "Summary of Enrolments Table" show student enrolment in vocational education from 1963 to 1977 and the utilization rate for vocational education facilities from 1974 to 1977. Data in this table do not show the relationship that exists between programs available and the number of students enrolled in these programs. Previous and more recent information is not available. The information is derived from a series of booklets entitled, "Statistical Information Pertaining to Senior High Schools Offering Vocational Programs." The student enrolment figure is derived from information obtained through school records as of October 1st of each year.

Table 1
Summary of Enrolments

Year	Number of Students	Utilization Rate
		(Percentage)
1963	168	
1964	260	
1965	285	
1966	346	
1967	361	
1968	531	
1969	544	
1970	589	
1971	667	
1972	731	
1973 ^(a)	698	
1974	701	112.0
1975 ^(b)	606	102.0
1976	691	108.0
1977	721	

(a) Dry Cleaning was discontinued.

(b) Appliance Servicing and Commercial Sewing were discontinued.

The utilization rate for the vocational education facilities is higher than that shown in the above table because many of these facilities are used by vocational education teachers who offer exploratory vocational education programs to students. These exploratory programs have heavy enrolments in electricity, beauty culture, food services, and health services programs. Other factors that contribute to high enrolment figures are: an increase in the pupil-teacher ratio, higher student retention rates and the decline in the number of drop-outs.

It is expected that for the school year 1978-79 and beyond, that for the first time in the history of secondary school vocational education in Alberta, it will be necessary to operate at least three programs on a double shift basis.

EMERGING PROBLEMS

It became evident to the Board of Trustees of the Edmonton Separate School System (which in 1975 was subsequently named the Edmonton Catholic Schools) as early as 1971 that some problems were beginning to emerge that would have a direct influence on its vocational education programs of studies. Some of the major problems that did emerge were that equipment that had been purchased in the early 1960's was becoming obsolete and required upgrading and replacement; maintenance and operational budgets were escalating rapidly as a result of the inflationary spiral and facilities were becoming inadequate for the increasing enrolments in vocational education.

In September of 1971, Mr. W. Pura, Director of Vocational Education for the school system, was authorized to conduct a study of vocational education in the system. This study was conducted with the assistance of interested administrators and teachers who reported back to the Board of Trustees on the following:

1. The objectives of vocational education for the Edmonton Catholic Schools.
2. The industrial education matrix as developed and presented to the secondary schools by Dr. J. Harder, Assistant Director of Curriculum, Alberta Education.
3. Utilization of facilities.
4. Depreciation of vocational education programs as they meet the needs of a constantly changing society.

THE PHENOMENON OF CHANGE

In view of the emerging problems that were becoming evident with regard to the vocational education programs, especially at St. Joseph Composite High School, the administrators responsible for the vocational programs turned their thoughts and efforts to the process of change. The process of change can be described in terms of evolutionary theory or functional theory. Early sociologists generally adhered to a belief in social evolution, the progressive development of social patterns and social institutions over a long period of time. Auguste Comte and Herbert Spencer devoted much of their efforts towards identifying the various stages through which society passed and they believed it was possible to chart the progress of mankind along predictable lines from the simple to the complex. While there is some validity to the lock-step theory of social evolution insofar as some social developments are necessary to make other developments possible, the theory of evolution does not hold true upon critical examination of present day society. In this age of rapid technological development, particularly in the area of communications, many peasant societies have adopted complex technological and sociological innovations from very advanced industrial societies.

The simplistic evolutionary theory of change when viewed through a social organization of a school and its attendant administrative structure, denies the principle of diffusion whereby social organizations and their structure can change and redirect their own pattern of development at will by simply borrowing ideas and concepts from other similar social organizations. It is the contention of the

administrators of the vocational education programs at St. Joseph Composite High School that traditional administrative structures are outdated and non-functional in terms of vocational education programs.

Functional theorists, such as anthropologists A. R. Radcliffe-Brown and Bronislaw Malinkowski, and sociologist Durkheim, focused their studies on the effect of a social pattern upon a social system. The functionalist theory is akin to Darwin's theory of natural selection. The theory incorporates the elements of variation and challenge. The functional theory contends that social systems are inherently flexible and social roles are performed in varied ways because of personal variations. Challenges are met with differentiated and varying degrees of success by various members of a social group. When a social grouping finds a solution that increases its adaptive capacity or its degree of success, the solution is more likely to be accepted and conserved. Challenge results in the evolution of more and more adaptive cultures. The challenge in education stems not solely as a result of technological innovation, or other sociological events, but from ideas. Man is a problem-solving animal and he responds only to those problems that challenge him. The institutionalization of ideas is a workable concept and it is with this concept in mind that the administrators and vocational education teachers at St. Joseph Composite High School sought to solve the more urgent problems in vocational education and to institutionalize the solutions into new dimensions for educating vocational education students.

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Chapter 3

RATIONALE FOR CHANGE

In 1967, and as a direct result of the withdrawal of federal funding to the province for the operation of vocational education, local school boards throughout Alberta became rather apprehensive about the fate of vocational education in the secondary schools. Influences, external and internal in nature, had developed which placed a different emphasis upon the vocational education scene. The unemployment picture of the early 1960's had dissipated, the economy of Canada had recovered and numerous individuals within and without the educational milieu were questioning the validity and worth of the vocational education programs in the secondary schools. Additionally, many school districts had over-constructed their vocational education facilities which were not being used and enrolments in vocational education courses appeared to be dropping.

This chapter deals with the actions taken by the provincial government to rectify this situation, and describes in detail the actions that were taken by the Edmonton Catholic School Board in conjunction with the administration and the vocational education staff of St. Joseph Composite High School to design a model for its vocational education programs of studies that would meet the needs of the student body.

THE PROVINCIAL MODULAR CURRICULUM 1969

The federal and provincial governments of Canada had invested

approximately \$189,000,000 in vocational education between 1961 and 1967, or during the life of the Technical and Vocational Training Assistance Act. At that time, provincial authorities had seen the need in the province for a skilled labor force and enthusiastically launched into technical and vocational education programs. In 1967, the federal government withdrew its support from shared-cost arrangements of the Technical and Vocational Training Assistance Act that it had with the provinces to finance these programs and the provincial authorities were faced with the major problem of taking over full responsibility of the continuation of these programs. Vocational educators at the secondary school level were faced with a possible crisis when they learned that many of the facilities that were built for vocational education were either under-utilized or, in some cases, shop areas were actually closed down, while in other cases, the facilities that were built were used as expensive equipment storage warehouses. In still other cases, vocational education shops that had been built and funded for vocational education purposes, were used to serve other functions such as libraries or classrooms.

The Industrial Education Matrix

To negate some of the above problems and to maximize the utilization of facilities where vocational education programs were taught, Dr. J. D. Harder, High School Inspector for Vocational Education, presented, in 1969, to the administrators of vocational education a matrix for industrial education. This matrix not only brought forth a name change for vocational education to industrial education; it also brought about a change in philosophy for vocational education.

Prior to the presentation of this matrix, vocational education programs were normally offered in time blocks, of a-half day, five times a week and the stated objective of this program was to prepare the student with entry level skills for the world of work. The new direction that industrial education was to take was a shift in emphasis from skill development toward career development.

The term industrial education lacks a clear definition and seemingly implies an umbrella term covering all of a student's experiences of an occupational nature beginning in elementary school and terminating in the world of work or in recurrent education, depending on the student's career choice. The figure on the following page visually displays the continuum of experiences that were outlined in the industrial education matrix. The rationale for the matrix does not mention the under-utilization of vocational education facilities but describes the flexibility factor that is built into the matrix. The following quotations are taken from the 1974 Handbook in Industrial Education which is an official publication of Alberta Education.

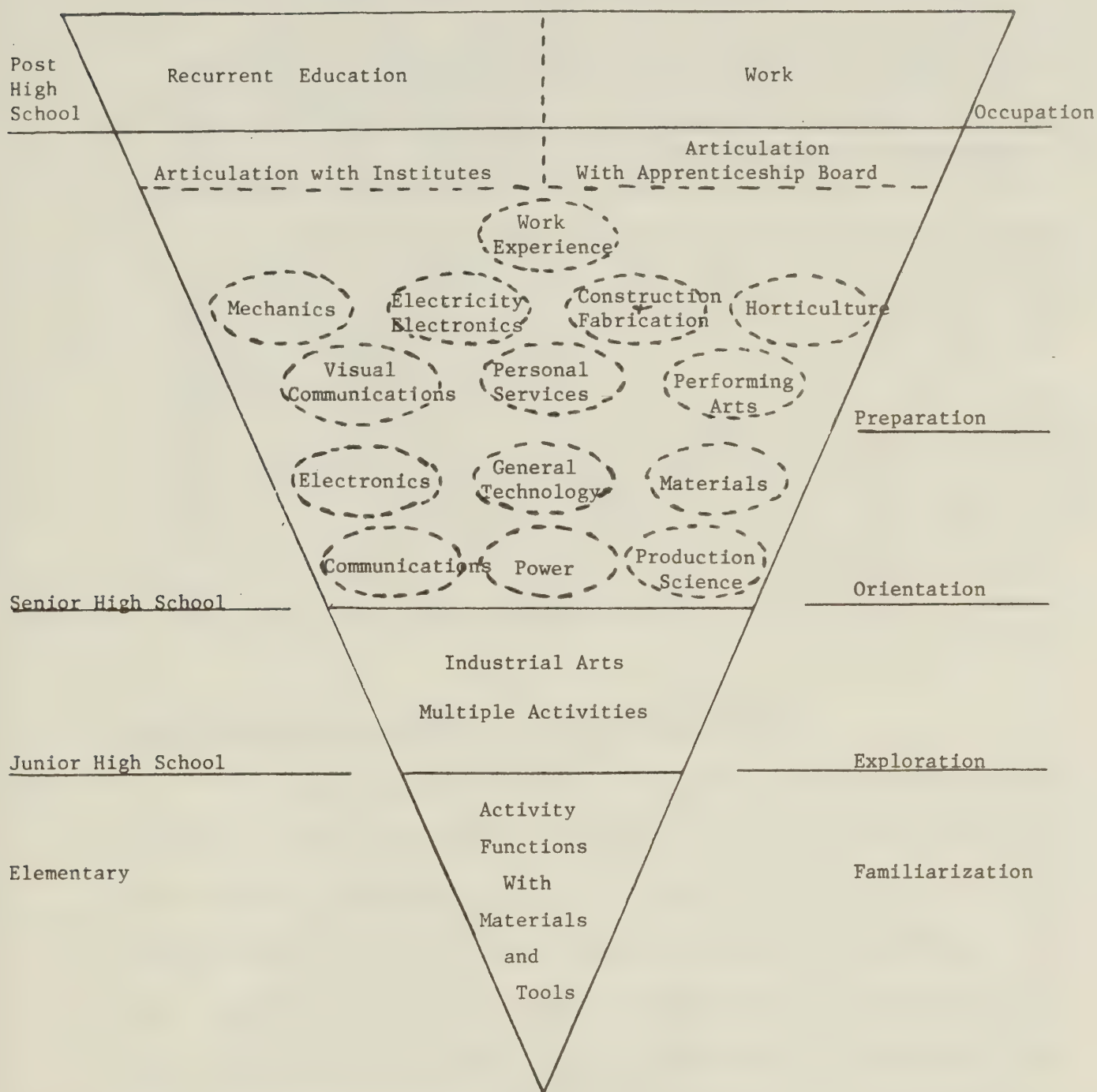
The Industrial Education program is concerned with career development. Because careers today do not develop along predictable lines, our education program must provide considerable flexibility so that students have options of several career choices. (p. 1)

Our task in the secondary school then is to provide students not only with entry skills for several careers but to orient the program to meet social and cultural goals. (p. 1)

The Industrial Education program provides such options through the introduction of courses in modules of 125 hours that can be sequenced in a number of patterns. (p. 4)

This same Handbook offers the following as a definition of industrial education:

ALBERTA INDUSTRIAL EDUCATION PROGRAM
FOR
CAREER CHOICE AND DEVELOPMENT



Legend: _____ Solid line indicates levels.

----- Broken lines and open spaces indicates opportunity to transfer to other options.

Figure No. 1

Industrial Education - Definition:

Industrial Education is a program consisting of courses that provide a continuum of experiences, starting with exploratory experiences and activities in the elementary and junior high school, expanding in the high school to the development of skills in career fields, and culminating in on-the-job experience.

Industrial arts, the exploratory phase of the continuum, provides the opportunity for the students to explore, reason, experiment and discover the reality of the technological society in which they live. The content of the program deals with industry, its organization, materials, processes, products, occupations, and the problems resulting from the impact of technology on society.

Following the exploratory phase, students may begin orientation studies in a career field. They may select courses of a more general nature in the Industrial Arts clusters or alternately take an introductory course related directly to a career field. From here they advance to the more specific courses in the Industrial Education programs which prepare them for a career. Chart 1 (page 35 of the report) illustrates the Industrial Education Program in conceptual form showing the advancement of a student from the awareness or familiarization stage to exploration, orientation, preparation and finally an occupation. These courses provide in-depth experiences in the development of skills in tool and machine operation, material processes, drawing and interpretation and a knowledge of the basic concepts related to the technologies. All the courses place emphasis on practical work and applied theory. (p. 2)

Industrial Education Matrix: A Contentious Issue

While not denying the fact that Harder's industrial education matrix did embody many redeeming features, many vocational education administrators voiced the opinion that the matrix should not be implemented unconditionally by local school boards, but the option should be made available to allow each school jurisdiction to determine how it could best satisfy the needs and the aspirations of its students in a manner suitable to student needs, their staff, facilities, equipment, and finances.

Harder's industrial education matrix became a contentious issue

with the vocational education staff and administration of St. Joseph Composite High School for the following reasons:

1. The vocational education programs offered at St. Joseph's had enjoyed high enrolments since 1962 and continued to grow both in numbers of students and quality of program offerings.
2. Due to the uniqueness of the school which served a large number of inner-city core students, preparation for employment was an economic necessity for the majority of these students.
3. Preliminary surveys conducted by the school indicated that job placement for graduates of the school's vocational education program was far in excess of the provincial average.
4. Many students would opt to leave school if the time spent in the vocational program were reduced.
5. Vocational education program selection was delayed to Grade 11 for students and it was felt that the majority of these students were quite well informed and had sufficient maturity to choose an occupation at that stage of their development.
6. To reduce the number of credits for vocational education to less than 35 would prevent students from receiving advanced apprenticeship standing for their high school work.
7. To adopt the modular matrix for industrial education in a school with a student population in excess of 2,000, would

become a time-tabling nightmare for the school administrators.

8. Many of the introductory vocational education programs of the industrial education matrix were non-grant bearing and it was felt that grants would no longer be forthcoming for the operation and support of vocational education programs which could lead to the possible curtailment of otherwise viable vocational education programs.
9. Career guidance and orientation was considered to be a necessary and vital component of the education of all students and should not be limited to students at the secondary school level at the expense of vocational education.
10. Some staff members were particularly incensed at the suggestion that the existing vocational education programs were narrow in scope and tended to lock a student into a specific occupation. It was pointed out that vocational education is craft-oriented, that each trade encompasses a multitude of specialties and that the very design of vocational education subjects allows for and encourages the transfer of skills and knowledges to related occupations.

Although it has not been documented, the impact of the resistance against the industrial education matrix by vocational education teachers and administrators did have an effect on the manner and nature that it was implemented. Some school jurisdictions saw fit to embrace the matrix either in whole or in part, while a minority of schools,

including St. Joseph Composite High School, rejected the concept entirely.

A CHOICE OF FUTURES - 1972

ITS IMPLICATIONS FOR VOCATIONAL EDUCATION

In 1967, the Government of the Province of Alberta commissioned a study to examine the entire education spectrum, from beginning to end. Chaired and compiled by Dr. W. Worth, a report entitled, "A Choice of Futures," was released to the public in 1972. The report covered all phases of education from early childhood up to and including adult education. The staff and administration of St. Joseph Composite High School, vitally interested in the implications this report would have upon vocational education, set aside November 18, 1972, as a school in-service day for an in-depth examination of the report.

In attendance at this meeting were the Superintendent of the Edmonton Catholic School District, Dr. H. A. MacNeil, members of the Board of Trustees, as well as selected representatives from business and industry.

From an in-depth review of the final report of the Worth Commission, "A Choice of Futures," it was found that vocational education was tangentially discussed. Those sections of the report that had implications for vocational education were extracted and presented at the meeting for discussion. These sections are quoted below and appear in the sequence as they appeared in the report:

... lifelong learning is primarily a matter of individual choice or occupational necessity . . . It must be an experience available to all. (Page 38, para. 1)

Opportunities for continuing education should be offered within a work study framework. (Page 38, para. 3)

... both technical-industrial and the socio-cultural studies will be imperative . . . for all. (Page 54, para. 3)

Schools must not skirt the career issue . . . a student should at least have some notion of what he wants to do next. (Page 54, para. 3)

16. The functions of technical institutes should emphasize career training and integration. (Page 56, para. 4)

18. Further education should emphasize motivation emancipation, career training, and integration. (Page 59, para. 3)

39. There should be universal access to institutions of higher learning for all Albertans who demonstrate the ability to progress and profit. (Page 82, para. 8)

44. Colleges should offer one-year programs of a vocational nature, academic upgrading and further educational opportunities. Those outside Calgary and Edmonton should offer transfer courses of a technical nature, and those outside university centres should offer university transfer courses. (Page 89, para. 3)

45. Alberta vocational training centres should be brought into the mainstream of recurrent education by amalgamation and reclassification. (Page 93, para. 4)

46. Degrees from technical institutes might be awarded upon completion of institute programs that involve appropriate rigor and scope. (Page 94, para. 4)

48. Learning clinics are a possible development 'owned and operated by a small group of qualified educators.' Some might specialize in human skills and others in technical skills. (Page 96, para. 5)

50. Employers and labor unions must be encouraged to negotiate day release periods so that schooling can become a part of regular work schedules. (Page 110, para. 5)

52. An educational fund to which employee, employer and government each contribute might be established. (Page 111, para. 2)

74. Program advisory committees for each career or job-family program manned by acknowledged leaders and recent graduates should be established to cement relationships between institutions and the larger community. (Page 129, para. 5)

82. The appraisal of academic qualifications of persons applying for membership in professions and occupations could be delegated

to the profession or occupation itself, subject to the scrutiny of a government-sponsored committee on professional and occupational qualifications. (Page 136, lines 2 to 11)

102. There is need 'for more effective planning of schooling to meet occupational needs, and some means of attracting people to certain occupations.' (Page 168, para. 4)

103. More effort should be made to integrate occupational placement with the secondary schools of the province. 'These might be modelled after the Youth Employment Service in Britain.' (Page 168, para. 8)

107. 'Related services necessary for student participation in such [life experience] programs should be provided through the schools...' (Page 180, para. 1)

108. 'Wage rate legislation would have to be adjusted allowing employers to pay lower wages to student workers.' (Page 180, para. 3)

109. 'Individual school boards and the Department of Advanced Education ought to co-ordinate the work opportunities available at the municipal and provincial levels of government' [life experience] education. (Page 182, para. 8)

136. 'The relating ... manpower demand statistics to specific programs is a planning activity that should be carried on at all organizational levels in Alberta: institutional, local, regional and provincial.' (Page 220, para. 3)

The consensus of the participants at this meeting was that vocational education was of vital concern to the education community and that government and industry must share the responsibility for the support of vocational education.

A REPORT ON VOCATIONAL EDUCATION

IN THE EDMONTON CATHOLIC SCHOOLS - 1972

At the direction of the Chairman of the Board of Trustees of the Edmonton Catholic School District, Mr. W. Pura, in 1972, was instructed to prepare and present to the Trustees a report on vocational education. The mandate given to Mr. Pura included the following purposes:

1. to review briefly the developments in vocational education in the Edmonton Catholic Schools,
2. to examine the programs currently offered, and
3. to project possible further trends and implications.

The report on Vocational Education in the Edmonton Catholic Schools was presented to the School Trustees in February of 1972 and was based on formal and informal, objective and subjective observation. All five recommendations of the report were accepted and tabled for future consideration by the School Trustees. When the report was presented, some board members did express their opposition to vocational education when they took the position that vocational educational programs should not be offered at the secondary school level.

Recommendation No. 1: The Edmonton Catholic School System, in cooperation with the business community, should continue to explore new approaches for providing a variety of programs for the development of personal and saleable skills.

Recommendation No. 2: The effects of the industrial education matrix should necessitate a greater involvement at all levels for the purpose of coordinating vocational, special vocational, industrial arts, home economics, business education, work study, work experience, and pre-vocational aspects of special education.

Recommendation No. 3: Each of the vocational education (and other) areas must continually be reviewed on its own merits. Low enrolment areas will have to be modified or redesigned while over-subscribed areas will have to be expanded. Because of the

lack of space for expansion at St. Joseph Composite High School, consideration should be given to the utilization of available space for some first year vocational education courses at St. Mary and Archbishop O'Leary High School.

Recommendation No. 4: In order to prevent excessive expenditures in any one budget period, a comprehensive plan should be implemented to provide for a systematic depreciation and replacement of equipment.

Recommendation No. 5: The Edmonton Catholic School System should give consideration to a comprehensive evaluation of its vocational programs. The evaluation should include a comparative cost-effectiveness study of the vocational and academic programs, with consideration of the economic as well as non-economic benefits, in terms of their respective objectives.

RELATED RESEARCH - 1973

By chance, rather than by intent, two central office administrators of the Edmonton Catholic School System had conducted research for an advanced degree which provided evidence and support for the direction that the administration and staff of St. Joseph Composite High School had taken in relation to their interpretation of the goals and objectives of vocational education.

Brosseau (1973) completed a doctoral research on the "Opinion of the Public on Current Educational Practices." One of the significant findings of that study was that 69 percent of the sample involved in the study agreed that high schools spent too much time preparing

students for college and not enough time was spent in preparing them for the world of work.

Klotz (1973), in a doctoral study entitled, "In Which Programs Are the Grade IX Failures Better Accommodated: Regular High School Programs vs. Special Vocational High School Programs" found that:

1. Vocational courses were cited as being most helpful because they provided practical knowledge and experience. Other benefits were cited as developing responsibility and learning how to work with people.
2. Academic subjects generally were listed as least useful.
3. Practicality appeared to be the most important criterion for judging a subject or experience beneficial.
4. The majority of students thought schools should provide more practical programs.
5. Ninety-one percent of special vocational students felt that their high school experience contributed to finding a job compared to only 12 percent of the regular high school students.
6. Eighty percent of all respondents stated that more practical courses would be the most desirable modification in the school program to ensure their getting a better job.

SCHOOL IN-HOUSE RESEARCH

One of the recommendations made in the report on Vocational Education in the Edmonton Catholic Schools (1972) was Recommendation No. 5 which stated:

The Edmonton Catholic School System should give consideration to a comprehensive evaluation of its vocational programs. The evaluation should include a comparative cost-effectiveness study of the vocational and academic programs with consideration of the economic as well as the non-economic benefits in terms of their respective objectives. (p. 14)

The Edmonton Catholic School System in the spring of 1973 was invited to participate in the Inter-Provincial School Program Evaluation Project. The project included schools throughout Alberta, Saskatchewan and Manitoba. The Superintendent of Schools, Dr. H. A. MacNeil, recognizing the involvement of the school as an opportune time to fulfill Recommendation No 5, assigned two high school administrators from the system to attend the conferences that were associated with the project and to involve their staffs in the evaluation project. Central office administrators of the system felt this involvement would be of value in helping to make decisions concerning the vocational education programs at St. Joseph Composite High School.

In the spring of 1973 a preliminary meeting was held with these research personnel and the vocational education teachers of St. Joseph Composite High School to determine if these teachers wanted to become involved in the school evaluation project. Following discussions of the evaluation project and its implications for the school, the vocational education teachers agreed to become involved in the evaluation study. For its involvement in the study, the following statement of need for the school was adopted:

Statement of Need

Since its inception into the Alberta educational scene in 1962, vocational education has to some extent, especially in the eyes of its critics, failed to establish itself as a viable alternative to the

traditional academic-oriented courses of study. It is recognized that while most of the critics of vocational education express their concerns in terms of economics or costs, others are becoming concerned about the relevancy of the goals and objectives of vocational education and are expressing interest in how these goals are being met. If vocational education is to establish and maintain its desired position within the educational milieu, it is essential that valid on-going evaluative research be instituted so as to direct the delivery of the vocational education programs within the parameters of the stated goals and objectives.

To develop an instrument that could be used to collect data on the students and the vocational education programs of the school, the vocational education administration and the vocational education teaching staff met one full day prior to the opening of school in September, 1973. To provide staff with background information that would assist them in selecting and designing questions for this instrument, the following reports were made available to staff:

Edmonton Public School Study (1971),
Calgary Separate School Study (1970),
Report on Vocational Education in the Edmonton Catholic
Schools (1972),
Department of Education Curriculum Evaluation Student
Questionnaire and Result (1971-73),
Department of Manpower and Immigration Career Decisions
Project (1967),
Vocational Education Goals (1961), and

Secondary Education Goals (1972).

Largely because this project was internally generated and its emphasis would be internal rather than external, the vocational education teachers re-affirmed their support of the project. Five teachers volunteered to serve as group leaders who would lead and coordinate small brain-storming sessions that would:

- provide inputs by an exchange of ideas,
- clarify any concerns about the project,
- determine the direction and objectives of the project, and
- overcome previous attitudes and experiences associated with externally generated research.

From a review of the background material and the brain-storming sessions it became readily apparent that the proposed project would be of such breadth and magnitude that it would be completely unmanageable in relation to available time, finances, human resources, and that the project might duplicate some of the efforts of the Department of Education Evaluation Study that was completed in 1973. Because of these reasons and because group interaction revolved around philosophy and methodology of conducting the project rather than the evaluative process, it was agreed among staff that a questionnaire unique to the school be developed.

A basic question that staff had to face was whether or not the original objectives of vocational education as promulgated in 1960 were still valid when compared to the work ethic of the 1970s. Some of the other questions that staff had to consider were:

Is the primary objective of vocational education still

considered as training for useful employment or is it more in that it fulfills other needs of the individual student?

Does the philosophy and objectives of vocational education of the Edmonton Catholic School System differ somewhat from the original objectives of the vocational agreement?

Even at the outset, was our emphasis upon the total development of skills to meet the labor market?

A consensus was reached among those at the meeting that the most useful input in assessing the effectiveness of any vocational education program was to receive feedback from the learner at various stages of development. The decision was made to conduct a longitudinal evaluation study that would cut across three distinct periods of the student's educational development. The three developmental periods that were involved included:

Intake (entrance to the program)

Process (upon completion of the program)

Product (post high school follow-up)

To collect the required data, it was agreed that the most suitable instrument for this purpose was a questionnaire. Since no questionnaire was available, it was incumbent upon the participants to design their own instrument. One of the major problems in designing the questionnaire that would be administered to students entering the vocational education programs was to write questions that would determine the worth of a particular program in relation to the perceptions of the goals and objectives that the student had established.

A teachers' workshop was held for the primary purpose of writing

questions for the questionnaire that would have both face and content validity. After the questionnaire was completed it was pilot-tested on a group of selected vocational education administrators, teachers and students of the school. The purpose of the pilot test was to determine if any of the questions of the research instrument were ambiguous or poorly phrased, to determine question sequence, and to determine the amount of time it would take to complete the questionnaire. (A copy of this instrument can be found in Appendix A). Early in October, 1973, the first questionnaire was administered to all students who were enrolled in the 12/22 vocational education programs.

Results of the Survey

Some of the results of this survey indicated that the majority of students who completed the questionnaire viewed vocational education as a legitimate endeavor of the secondary school and that they had made a career decision and that the vocational education program they had chosen was related to that goal.

Data from this survey can be found in Appendix A, page 128.

CHAPTER REFERENCES

Hiebert, A. and Ritter, J. Vocational education for tomorrow.
Edmonton Catholic Schools, 1975.

VOCATIONAL EDUCATION FOR TOMORROW

(Hiebert-Ritter Report)

On February 17, 1975, Dr. MacNeil, the Superintendent of Schools, commissioned the principal and the assistant principal in charge of vocational programs of St. Joseph Composite High School to conduct a study on the school's vocational education programs. These two school administrators were also given the responsibility to use the results from this study to implement the changes that were deemed necessary to improve the viability and credibility of the vocational education programs offered at the school. A review plan for vocational education was formulated. This plan outlined the various steps that would have to be taken to collect data which could be used to make the necessary decisions (refer to Figure No. 2, Vocational Education Review Plan on the following page).

The major purposes of this study were:

1. To survey industry to determine its current needs as to types of workers required and the immediate job opportunities for workers entering the labor market.
2. To survey the school system to determine whether the school system could facilitate the training of students to meet the needs of industry.
3. To determine those areas where the school system could train or retrain people who may or may not be enrolled as students.
4. To determine if existing facilities, personnel and programs could be mobilized to meet such needs.

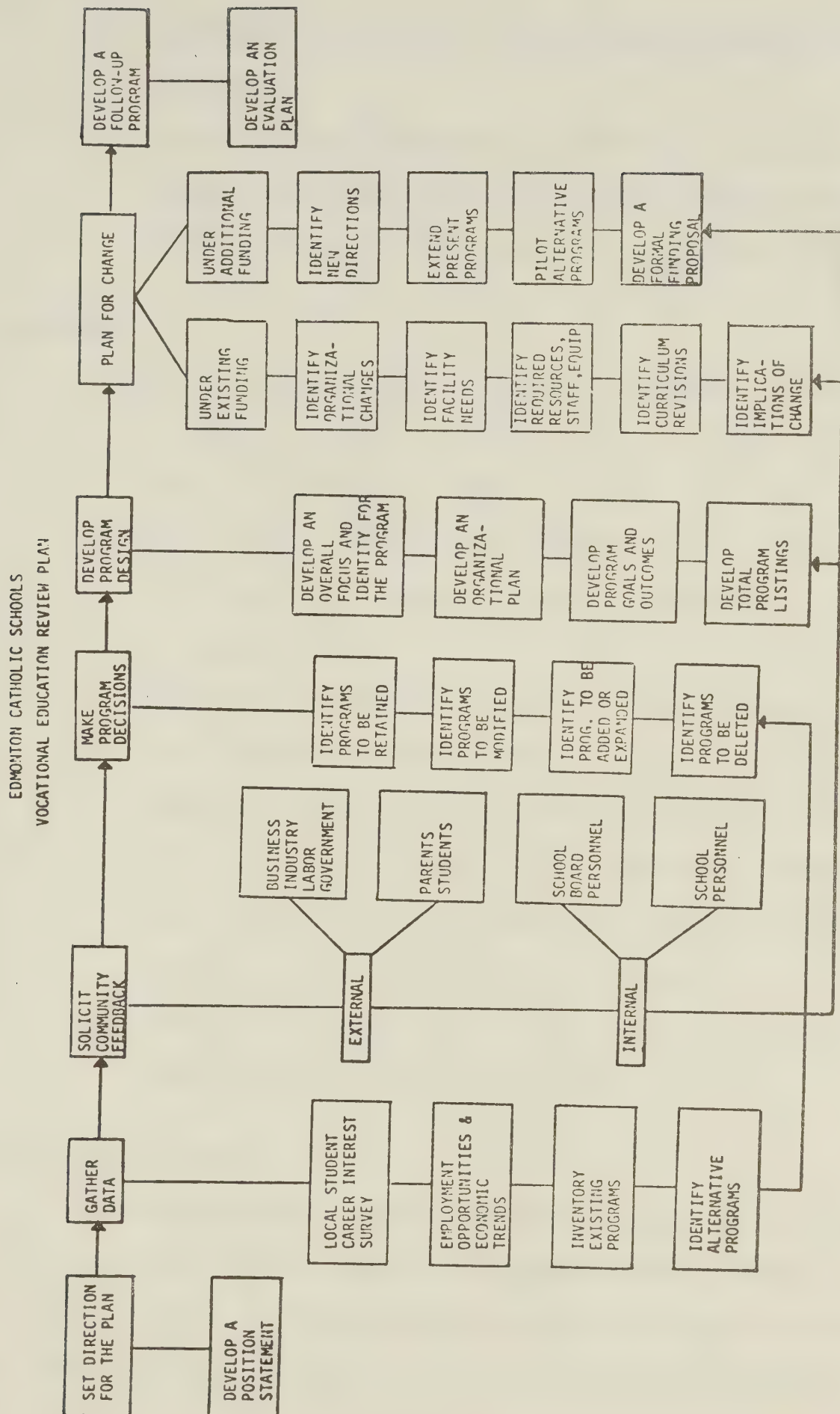


Figure No. 2

5. To present proposals for alternatives the school system may pursue.
6. To explore the cooperation and commitment the school system could receive from outside agencies, government and industries directly concerned with the skill development of youth.

Procedures

In conducting the study the following procedures were followed:

1. A search of current literature that was related to the purposes of the study was made.
2. Meetings and interviews were conducted with a number of individuals who represented education, government, labor, or industry.
3. A preliminary discussion report was prepared from information collected by the literature search and from the meetings and the interviews that were held with participants. This report was circulated to all individuals who had provided information to the study as well as to individuals who had no previous contact with the research.
4. Those who received a copy of the discussion report were asked to submit in writing their reactions to it.

Summary of Reactions

From an analysis of the comments that were made on reports that were received from the participants a consensus became apparent. Below is a summary of the viewpoints that were expressed by those involved in the study. It should be noted that at the time that the study was

conducted the Syncrude project was underway and local business concerns were in a state of anxiety over the labor situation that was developing.

A. SUPPLY-DEMAND OF SKILLED WORKERS

1. With the emphasis being given to capital expansion due to the energy crisis, there appears to be a shortage of skilled tradesmen in the construction sector. How serious depends on to whom you speak. The drain off for the proposed major projects will definitely affect the smaller, local industries because the pool of qualified tradesmen is nearly non-existent. Also, the whole wage structure will be thrown out of kilter.
2. There appears to be a lack of consensus amongst the contracting industry, manpower and the trade unions on the seriousness of the shortage. Unions examine the situation from a different point of view because they must protect the economic interests of their membership.
3. There is an emerging phenomenon of increased job hopping. More alternatives exist, thereby causing less stability in the work force.
4. Our present shortage is due to the way we use and manage people. There are peaks and valleys in the demand for skilled tradesmen and more attention is required in their transition to the maintenance sector or other forms of employment.
5. The construction industry must share some of the blame because it has not positively sold itself as a career

opportunity. It is difficult to get a meaningful fix on the supply-demand situation because many projects are not firmed up because of capital.

6. Industry assumed that vocational programs in the high school and post high school institutions would produce the required skilled people. Rightly or wrongly, they had the expectation that people would be fully trained to step into the job but found out that it just doesn't happen that way. As a result some industries may have abdicated, to some extent, their role and responsibility in the training of people.

7. The smaller commercial industries, the local construction firms, the apprenticeship board, and the associations are all expressing a similar concern about the large industrial contractors' role and responsibility in the training of people. The large industrial contractors cooperated or committed themselves reluctantly in training apprentices in the past. You train them and we'll take them. The emphasis in skill development must be for industry in general, not just the glamorous areas, e.g. Syncrude.

8. Some concern has been expressed about the rigid requirements to be a tradesman and this may only lead to the possibility of tradespeople being bypassed. Industry argues that the age of specialization is here and that people could be made productive much sooner than exists in the present apprenticeship training. Apprenticeship people

argue that they must protect the standards and they have experienced the negative results to a person's career because of overspecialization.

9. Many industries and businesses are demanding more education, training skills and experience than are really required.

B. PRODUCTS OF THE EDUCATIONAL SYSTEM

1. They don't understand the practical job scene. When people hit their first job, they must learn to survive because most are ill-prepared to face the world of work. If they can perform the job, become productive and gain self-confidence, they will overcome that initial shock. Many young apprentices will indicate that they had no idea what it was like or didn't realize some of the things that they would have to do.

2. They have an inflated perception of their ability to perform, especially from our post secondary institutions. There appears to be a hang-up on certification to the extent that once a person has his papers, it guarantees his livelihood. People go through a program and then can't perform to expectation, yet expect remuneration commensurate with their certification.

3. Some people expressed the view that they would prefer a high school type with saleable skills because they are more flexible and willing to start as "low man on the totem pole." They have to learn how to do some of the menial tasks first.

4. They have a questionable attitude, lack of pride and

commitment towards their work. To a great extent, they are a product of our times, and somehow we have to try and turn things around.

5. The high school diploma has little or no value anymore to a prospective employer.

C. VIEWPOINTS ON HIGH SCHOOL VOCATIONAL EDUCATION

1. Vocational education, throughout the province, generally lacks credibility with industry. Some people suggest that it was doomed from the start because there never was a genuine commitment from the outset. Many boards opted for federal funding as an opportunity to build large schools with equipped shops and we are now engaged in the "utilization phenomenon."

2. There appears to be a dualistic view as to the objectives of vocational education. The general thrust by the Department of Education, through curriculum development, has been that vocational education is a part of general education and it does not purport to develop people with saleable skills. Others argue that this is the very root of the problem and the original intent was for specific skill development. Industry and the apprenticeship board are certainly disillusioned with this trend because they view many of the vocational programs as glorified industrial arts programs.

3. In spite of the barriers, industry does recognize that certain programs have maintained credibility due to the

personal commitment and conviction on the part of some vocational teachers. In other areas where we had previous credibility, we lost it through personnel changes, a gradual submission to a general arts approach, modification of the program to the calibre of student, etc.

4. Some educators and parents have perceived the vocational education program as a repository for those who can't cope with the usual academic route. The assumption appears to be that if you can't do anything else, try a vocational education program.

5. Students coming out of some vocational education programs don't realize that they have only skimmed the surface and many are unable to articulate with the technologies or the apprenticeship program. Also, many of the students lack the basic 3 R's and some of this can be attributed to the calibre of students that are guided into the vocational education programs and the mode for presenting the academic content.

6. Do young people of high school age know their own interests and abilities well enough to decide on a vocational education program or skill training program? Maybe more career education at an earlier age would assist them in this regard.

D. CONCERN OF PROVINCIAL GOVERNMENT

Economic and construction activity had accelerated in Alberta as a direct result of the province's favorable

position in relation to the world energy crisis. The resultant demand for skilled labor by industry became an immediate concern of the provincial government. The construction of the Syncrude plant at Fort McMurray had caused a drastic drain-off of skilled construction and fabrication workers from the rest of the province and the business and industrial community pressed the provincial government for a policy statement concerning the labor situation. In 1974, at the request of the Calgary Chamber of Commerce, Premier Lougheed presented a speech in which he referred to the following:

This province's economy is too vulnerable, it is too dependent upon the sale of depleting resources, hence a need to diversify our economy.

Our basic goal is - as a province in transition - to diversify and become less dependent upon the sale of unprocessed resources, particularly non-renewable resources.

We have four supplementary goals, one of which is the upgrading of skills of our citizens to create higher productivity, greater income and more job satisfaction than comes from unskilled work.

To emphasize in government programs - in skill upgrading to provide as much as possible the needed manpower requirements by Albertans, and here I refer to our expanded technical and vocational training programs and our job training emphasis.

Views of Parents

Two administrators of St. Joseph Composite High School evaluated the opinions of parents of students enrolled within the Edmonton Catholic Secondary Schools regarding parental attitudes, opinions and knowledge of vocational education. Contacts were made with 400 parents

and the two main methods that were used to collect data were a questionnaire survey and a structured personal interview. Some of the results of the questionnaires and the interviews were:

1. The greater majority of parents agreed that it was the role of the high school to prepare students with job entry skills.
2. A majority of parents felt that the high schools place too much emphasis on preparing students for university and too little emphasis was placed upon preparing students for occupations.
3. Eighty-seven percent (87%) of parents supported the notion of providing training for blue-collar jobs.
4. Slightly less than fifty percent (50%) of the parents thought that high school students knew their own interests and abilities well enough to make a realistic career choice.
5. Slightly more than fifty percent (50%) of the parents interviewed agreed that they would encourage their own son or daughter to enroll in a vocational education program.

Views of Students

To collect data on the opinions that students held toward education in general and vocational education in particular, extensive use was made of the questionnaire method to compile these student opinions. Of the 262 students who were involved in this in-house research, they were either presently or previously enrolled in a large inner-city school of the Edmonton Catholic School System. The results of the research show that:

1. Most students stated that more practical courses would be

the most desirable modification in the secondary school program offerings.

2. Academic subjects were considered as being least useful in preparing a student for the world of work.
3. Almost all students indicated that it was a necessary function of high schools to prepare students for an occupation.
4. Students enrolled in vocational education courses indicated that they had decided upon a career and that their vocational education programs were directly related to their future goals and aspirations.

Conclusions

After an in-depth study of the background information that was accumulated from the manpower forecasts of the federal and provincial governments and from a review of the reactions from the various interest groups who received the discussion report, the following conclusions were drawn. Some of these conclusions have implications for vocational education.

- DEMAND FOR SKILLS

The current (1975) industrial expansion in the province has created an unprecedented demand in Alberta for skilled trades personnel in all sectors of the provincial economy

- NEED TO BRIDGE GAP

Young people from the educational institutions in the province are ill-prepared to face the realities of the work situation.

- NEED FOR REALISTIC CAREER CHOICES

Many people are backing into employment with a mismatch between their educational qualifications and employment opportunities of which they may be unaware.

- NEED TO REASSESS HIGH SCHOOL VOCATIONAL EDUCATION PROGRAMS

It is an opportune time to restructure and establish the direction and delivery of present (1975) vocational education programs with a greater emphasis on saleable skills.

- NEED FOR VIABLE ALTERNATIVES

The situation in Alberta is such that new directions, cooperatively supported by industry, labor, education, government, and the general public, ought to be examined and embarked upon so as to speed up the flow of skilled workers to Alberta's labor pool.

ALTERNATIVE ONE

Pre-Employment Skill Training - PEST

The two researchers from the school realized that if changes were to be brought about in the vocational education programs, the full cooperation of the Board of Trustees was essential. It was anticipated by the researchers that a singular proposal outlining a change in the direction and implementation of vocational education programs would in all likelihood be met with opposition, since a few board members had in the past expressed the opinion that vocational education was not suitable education for children. The researchers agreed that at least two alternatives should be presented to the Trustees so that the question of

alternatives would be discussed rather than the pros and cons of the value of vocational education. Alternative One was presented largely as a diversionary tactic since the researchers know that such an undertaking exceeded the responsibility and authority of a school district as presently constituted under the laws of the Province of Alberta. Alternative One was named Pre-Employment Skill Training (PEST). The following is a set of descriptive statements which describe the alternative program (PEST):

A. GENERAL FEATURES

1. That the purpose of PEST is to complement not compete with many of the existing programs at the Northern Institute of Technology (NAIT), the Alberta Vocational Centre (AVC), or those programs offered under the auspices and direction of the provincial Apprenticeship Board.
2. That specific PEST programs be initiated or discontinued as quickly as the labor supply-demand requirements change for that specific program.
3. That the basic purpose of PEST is to provide students and non-students with an alternative to present secondary school vocational education programs for obtaining saleable skills, job attitudes and practical job experiences.
4. That PEST programs establish standards which will establish credibility with all sectors of the industrial community and all other education programs.
5. That industry must be committed to providing meaningful work stations so that the practical on-the-job scene

training is integrated fully with the formal training at PEST Centres.

6. That industry provide employment and job opportunities for trainees who are recommended from the PEST Centres.

7. That the PEST trainees must be prepared to allow their credentials to float on the labor market. How can you perform on the actual job, not what courses did you take, would be the criteria for recommendation for employment.

8. That a form of direct articulation be established with the Apprenticeship Board and Northern Alberta Institute of Technology so that the PEST trainee may enter those programs at various stages.

9. That Trade Registry Provisions be applied so that successful Pre-Employment Skill Training (PEST) trainees be given some priority for acceptance into the apprenticeship program.

10. That each specific Pre-Employment Skill Training Program establish an Advisory Board comprised of labor-management representatives for that trade area.

B. FACILITIES

1. That PEST Centres be established in locations away from our present high school atmosphere so as to stimulate a work-life situation, to provide a more concentrated effort and to provide more flexibility in daily operations of centres providing skill training programs.

2. That PEST Centres, depending on the availability of

facilities, could be centralized or decentralized. Pos-
sibilities where PEST Centres might be established:

(a) Centralized in one building

- Buildings with vacancies (Maybe a trade-off for several elementary schools with declining enrolments)
- St. Joseph could be reorganized into a trade-vocational school
- St. Mary's or other high schools with declining enrolments

(b) Decentralized into several buildings

- Convert elementary schools with declining enrolments
- Obtain leased portion of Service Building owned by the school district for some of the construction trades
- Lease old warehouses, garages, shops, etc.

(c) Combination of both (a) and (b).

3. That industry cooperate by making available meaningful industrial work sites and personnel which may be used continuously by Pre-Employment Skill Training trainees. A buddy system between the trainee and a journeyman worker would be established at the work site.

4. That available space be provided at related PEST Centres for factory personnel or manufacturer's representatives to set up new equipment or displays for the purpose of carrying on short term training programs for journeymen and other qualified personnel employed in that particular field. All

PEST trainees would share in the programs related to their trade area.

C. EQUIPMENT

1. That the amount and kind of equipment at each PEST Centre will depend directly on the availability and actual equipment used by trainees at the industrial work sites.
2. That adequate equipment be provided at each Pre-Employment Skill Training Centre so that all trainees obtain fundamental, practical training before being placed at an industrial work site.
3. That capital outlay for all equipment be shared by industry, government and the manufacturer.

D. CURRICULUM

1. That the curriculum be in harmony with programs presently offered by the Apprenticeship Board, the Northern and Southern Institutes of Technology and labor unions. Emphasis is to be placed upon those areas of concern which are suggested by the Labor-Management Advisory Board.
2. That the skill training programs be short term highly intense with an emphasis on performance and standards in the practical skills.
3. That the skill training program emphasize practical production oriented activities which will be reinforced with actual job experiences at the industrial work sites.
4. That the skill training program be based on performance objectives with no hang-up on credits, hours, length of

of school year, credentials, etc. Are you able to learn the skills of the trade, obtain a job, perform to expectation on the job would be the focus of attention.

5. That the amount of time would vary for different trades, sub-trades and individual differences of trainees.

6. That emphasis be directed towards attitude building of trainees with the hope to reestablish pride and dedication in their work.

7. That background and skills in applied mathematics, physical sciences, communication skills, and labor organization and management be used with the skill training so as to achieve a meaningful balance between the practical and theoretical. Resource personnel could be made available as required for each area.

E. PERSONNEL

1. That the instructors involved in the PEST Project be first class journeymen with the following characteristics which would be identified by: contacting fellow workers, previous and present employers, by personal interview, and through testing by the Personnel Department of the school system:

- Be mature, well experienced, and exhibit excellent citizenship characteristics.
- Have earned the respect of fellow tradesmen.
- Have demonstrated that he has up-to-date knowledge and ability in the trade.

- Have the innate ability to relate and communicate effectively with people of all ages.
- Shows evidence of being well organized and self-confident.
- Have leadership qualities and enthusiasm towards his work.
- A teaching certificate, while desirable, would not be a requirement for employment to teach at a PEST Centre.

2. That the most critical component in the success of this program would be the quality of the teaching personnel.

Sufficient remuneration must be provided to these individuals in order to attract the best people from industry. As the program develops, differentiated staffing and incentive schemes should be applied.

3. That all personnel would be hired on short term renewable contracts so both parties could exercise their option to renew the contract.

4. That all new instructors would be given an orientation program at the outset with a continuous inservice program to follow. An effective supervision program will be required from qualified educational personnel.

5. Evaluation would be continuous, and inputs would be provided from all interested parties.

F. FINANCES

1. That both government and industry, if they are serious about the skilled labor shortage and its impact on the industrialization of Alberta, should be prepared to share

all costs in the development and operation of the PEST Program.

G. PUBLICITY

1. That an extensive promotional campaign and effective guidance program be launched so that all parents, students and young adults would be fully aware of the PEST alternative vocational education program.
2. That the recruitment campaign be directed at students who are aimlessly engaged in a diploma program, who are borderline matriculation students and others who do not have a saleable skill.

The paradigm on the following page was included in the Hiebert-Ritter Report for the benefit of the Trustees. The PEST Centres are depicted as they relate to students and non-students (trainees), to staff, to academic curriculum, to the world of work, and finally to the multiplicity of services provided by the Alberta Advanced Education and Manpower.

ALTERNATIVE TWO

New Dimensions in Vocational Education

The vocational education programs in the Edmonton Catholic School System have with few exceptions been limited to St. Joseph Composite High School and it naturally follows that any new directions for vocational education will have direct implications on the present organizational pattern of that school. The current vocational education programs have shown the effects of time and require rejuvenation.

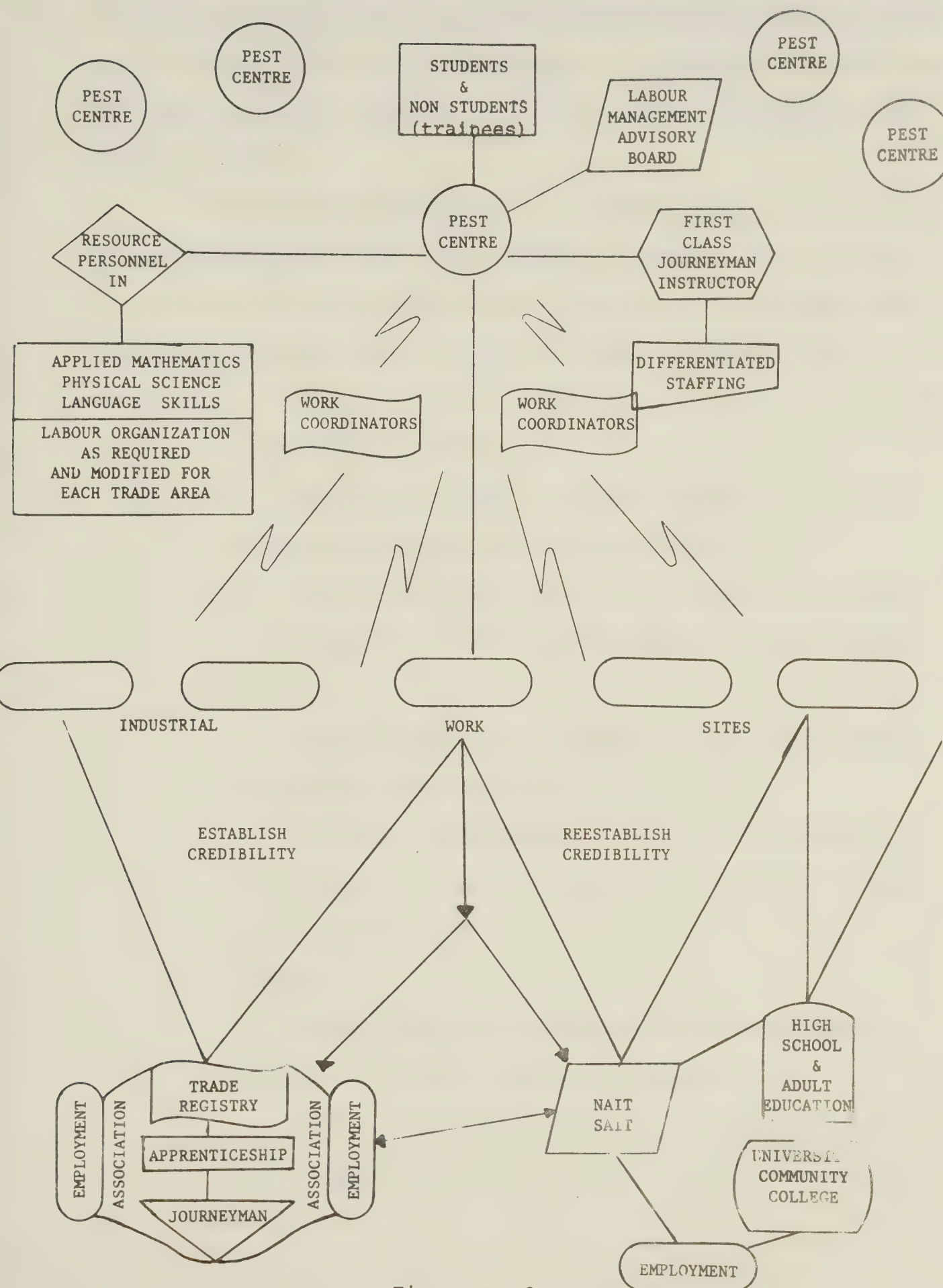


Figure No. 3

As a consequence of the Report, it was decided that it was an opportune time to reassess the entire vocational education programs of studies of the school with the view to restructure and re-establish new directions for these programs so that they would be in harmony with student and community needs.

One of the recommendations of the Hiebert-Ritter Report was that a committee be established to re-examine the purpose and delivery of present vocational education programs. To assist that committee with its mandate, it was recommended that the committee address itself to the following:

A. PHILOSOPHY - OBJECTIVES

1. Formulate a written statement of objectives for the program in relation to current needs (1975).
2. Clarify conflicting viewpoints with reference to vocational education, i.e. general education vs. skill development.
3. Develop a position with respect to career development and occupational preparation.
4. Define the role and purpose of St. Joseph Composite High School in relation to other schools within the school system and the school system as a whole.

B. PROGRAMS

1. Evaluate specific vocational education programs in relation to the newly established objectives.
2. Evaluate all vocational education programs with the view to expand or rejuvenate some and discontinue others.

3. Survey specific need before establishing new vocational education programs at St. Joseph and/or other high schools.
4. Consider the possibility of a vocational education program for the Business-Clerical area.

C. PERSONNEL

1. Make provision for the upgrading or reassignment of staff.
2. Re-examine the basis of qualifications for a vocational education teacher.
3. Re-examine the vocational education allowance and grid placement for teachers and aides.
4. Consider the concept of differentiated staffing within the vocational education shop areas whereby journeymen could carry out the practical instruction under the direction of a certificated vocational education teacher.

D. PHYSICAL FACILITIES

1. Establish a priority for renovations for the expansion of programs or development of new programs.
2. Determine if additional storage and warehouse space is available within the system.

E. EQUIPMENT

1. Develop a plan to phase out all 1962 vintage equipment and upgrade all vocational education areas with new equipment.
2. Streamline the Central Office ordering-tendering procedure.

F. FINANCES

1. Review the adequacy of the operational budget allocation.
2. Consider the decentralizing of the entire business-financial operation.

G. SCHOOL ORGANIZATION

1. Re-examine the school year and school day with the view to offering short term and long term courses at different times.
2. Evaluate the academic courses of the school and their delivery to vocational students.
3. Examine the present administrative structure with a view to accommodating any new directions.

H. ARTICULATION

1. Establish an overall plan for better integration of industrial arts, business education, career education, vocational education, and work experience programs.
2. Establish the mechanics for articulating junior vocational education programs from the other high schools of the Catholic School System.

I. RESEARCH

1. Assist with the direction to be taken for an on-going research and follow-up program.
2. Examine the possibility of having a set of performance objectives established for each program.
3. Determine if a student skill profile could be developed.

J. OTHER

Consideration be given to assessing a refundable fee when registering.

THE DECISION OF THE BOARD

On April 28, 1975, the final research report, "Vocational Education for Tomorrow" (Hiebert-Ritter Report), was submitted to the Board of Trustees of the Edmonton Catholic Schools. The report was reviewed by the board members and tabled as information. On June 10, Dr. MacNeil, Superintendent of Schools, sent the following memo to each of the incumbent trustees:

Re: Report on Vocational Education in the School System

On April 28, 1975, a Report on Vocational Education prepared by A Hiebert and J Ritter was submitted to the Board. At this special meeting, the Board tabled the report as information and requested that some study be made regarding the recommendations contained within the report.

The Hiebert, Ritter report suggested two major approaches which might be considered:

1. In the section of the report entitled, "New Directions", a Pre Employment Skill Training program was explored. This approach does not seem to be feasible within the present structure and the regulations of the Provincial Department of Education. Although the approach may be of great value it is probably a matter of major concern to other agencies than the school system. It is, therefore, recommended that the school district not move in the directions outlined under this program.
2. The report addresses itself to several recommendations regarding the present Vocational Education program in the section entitled "One Approach: Review of Present Vocational Programs". The report suggests that all the present programs would be re-examined within the scope of existing Department of Education structures, regulations and courses. It is felt that some move should be made in this direction and Mr Hiebert was requested to prepare a possible approach. Attached is a copy of a proposal as to how this re-examination of the vocational and educational courses might be carried out in the coming school year.

Recommendation:

It is recommended that the attached proposal to re-examine the vocational and educational courses and the programs in the school system be adopted.

That the coordinator responsible for the implementation of the changes be the Principal of St Joseph Composite High School. If it is impossible to provide for sufficient time for the principal to carry out this responsibility through re-allocation of duties within the present school staff, a plan for an additional person to be placed at St Joseph Composite High School to assist the principal in this project will be submitted to the Board at a later date.

Chapter 4

CURRICULAR AND PROGRAM CHANGES - 1975

Grouping of Vocational Education Courses into Divisions

Prior to 1976 several attempts had been made by the vocational education administrator and teachers to provide potential incoming vocational education students with a meaningful orientation program in order to assist them with their career choice. Listing of vocational education programs alphabetically in the school handbook ignored a commonality of skills that existed between similar occupations and it was felt that a grouping of skills would ease the problem of career guidance for both students and guidance personnel. Such a group was felt to be necessary by the administrator of vocational education when dealing with affairs directly related to a particular family of occupations.

The divisions of the Technical-Vocational Section and their occupations for each of these divisions are shown below:

Industrial Division - Automotives, Electronics and Welding

Construction and Fabrication - Building Construction, Electricity and Pipe Trades

Media and Communications Division - Commercial Art, Drafting, Graphic Arts, Performing Arts, and T.V. Crafts

Services Division - Beauty Culture, Food Preparation, Horticulture and Health Services

Preliminary indications are that the grouping arrangement for these courses has been advantageous. Guidance personnel report that their task has been simplified and they can more quickly identify a

student's interests and abilities and can recommend a suitable program for the student. Parents of students have informed the school that they find the new school handbook much easier to understand.

Of most consequence is the fact that it has been possible to develop a related program of academic studies for those students enrolled in a particular division of vocational education. In September of 1976, an Associated Studies program related to the Industrial and Construction and Fabrication Divisions was developed and implemented.

Associated Studies Program

The school administrator in charge of the Technical-Vocational Section who had worked with these students for seven years, made the following assumptions with reference to this group of students:

1. Many, if not most of the students who entered vocational education options seemed to possess a reasonable degree of academic ability.
2. Most of the students who entered vocational education options seemed to lack the motivation or desire to succeed in academic studies.
3. Most students who entered vocational education programs became highly motivated by activity-oriented education which the students considered practical and useful.

From these assumptions the concept was formulated of a specially designed program of studies that would overcome the above problems and at the same time present a program that was challenging and would motivate the student to learn at the level of the student's interest and ability.

As a result of the Hiebert-Ritter Report, the administration of the school initiated and implemented the Associated Studies program to help find solutions to the above assumptions and help find possible solutions to the following problems:

1. A disproportionately high number of vocationally-oriented students were leaving school early.
2. An extremely high rate of absenteeism from academic classes was recorded from the vocational education students.
3. Other students and administrators considered the vocationally-oriented students as disruptive and irritating in the traditionally academic-oriented classrooms.
4. Vocational-education students, as a result of poor attendance, particularly in the academic classes, experienced a high failure rate.

Associated Studies is a specially-designed program of academic studies that are directly related to the careers that are included in the Industrial and Construction and Fabrication Divisions of the program. The purpose of the Associated Studies program is to relate theory to practice. These studies focus on language arts skills, practical mathematical skills, applied sciences and social sciences. Associated Studies are compulsory for all students enrolled in the Industrial and in the Construction and Fabrication Divisions with the exceptions of those students pursuing a Vocational-Matriculation route.

There has been a change in philosophy of vocational education staff regarding the philosophy of vocational education. Education as a bridge between man and his work had been interpreted by most educators

and legislators as vocational education designed primarily to meet the manpower needs of a country. Recently among vocational education teachers and educators there has been a veering away from this philosophical position towards one that considers the total development of the individual. Philosophically vocational education at St. Joseph Composite High School is thought of as a means of enriching the learning experiences of the student, with experiences designed to develop an individual's self-concept and to use vocational education as a means to bridge the gap between school and the world of work.

The philosophy of the Associated Studies program extends beyond merely solving a set of problems. The philosophy of the program recognizes that each individual possesses unique abilities which have a specific purpose in the life of the individual. From this philosophy the following set of general objectives for the Associated Studies program were derived:

1. To maximize the general and academic upgrading of students through the offering of related subjects and related activities.
2. To provide the individual with the concept of a total society, its workings and strivings, and for the student to view his role as a necessary and vital part of that society.
3. To provide a learning atmosphere that is free of worry and stress where a student can study, work, and develop interests in a selected occupational field.
4. To improve the student attitudes so they learn to develop

self-confidence, self-reliance, responsibility and initiative.

5. To develop an understanding of the applications of academic disciplines in an industrial environment.
6. To emphasize good citizenship through moral and character training.

Curricular Changes

Curricular changes are generally necessitated from a sense of dissatisfaction concerning the usefulness or relevancy of a specific course or courses of studies. The first attempts at change were initiated by the members of the Technical-Vocational Section of the school in cooperation with the Academic Section. From this attempt a number of problems became evident. These problems were: either change was not seen as necessary or there was a decided reluctance and opposition to change. The latter problem may be partly attributable to the fact that individuals tend to remain secure in their methods and routines and in their willingness to accept failure in education as a natural and expected outgrowth of the educational process.

A quick perusal of the educational system portrays its strong bent towards elitism. The high academic achiever in this system is the recipient of its favors, and the student who is not academically inclined is often ignored. Some attempts have been made in the past by educators in the province to accommodate the non-academic student through the adoption into the curriculum courses such as English 13, 23, 33 and Mathematics 13, 23, 33. Unfortunately the design and implementation of these courses were primarily left to the discretion of

academic educators with the result that these courses were watered-down counterparts of the 10, 20, 30 series of academic courses. The courses that were developed at the 13, 23, 33 levels were not related to the specific needs of vocational education students. As a matter of fact, the 13, 23, 33 courses were made easier for these students.

Recognizing this deficiency, a group of five selected teachers were given the mandate to design courses for the Associated Studies program that would meet the needs of vocational education students. The subject areas chosen to be included as Associated Studies were: mathematics, English, science and the humanities. One of the major guidelines that these teachers received was that each subject area be related directly to specific vocational education offerings while at the same time meeting the curriculum requirements of Alberta Education.

The Associated Studies program normally precedes a student's entry or acceptance into a vocational education program and is deemed compulsory for these students. Students who wish to combine the matriculation route with the vocational education route are not permitted to enroll in the Associated Studies program.

Student Achievement - Associated Studies

For the Associated Studies program the Carnegie Unit as such was abandoned. In those areas in which a student exhibits weaknesses, additional instruction is provided. A student spends one semester in the Associated Studies program and in the second semester takes a vocational education option. Contact with the Associated Studies teachers remains: the weaker students are required to take additional instruction throughout the second semester until these students meet the

required level of achievement for the Associated Studies program. The achievement levels which have been set were determined cooperatively between the teachers of the Associated Studies and Vocational Education programs. Standards of achievement are constantly under revision so as to better meet the needs of each individual student. Evaluation of a student's achievement level is not left to an individual teacher, but is accomplished by a committee comprised of four teachers from the Associated Studies program, and is chaired by the department head of that program. Appeal procedures are in effect and the student has the right of appeal to the assistant principal in charge of the Technical-Vocational section of the school.

While registered in the Associated Studies program a student is not failed in a subject at the end of the five month semester. Once the student displays sufficient desire and willingness to succeed, necessary additional instructional time is provided on an individual or small group basis so that each student can be assured of a successful experience.

Diploma Requirements and Associated Studies

Another advantage that the staff of Associated Studies can offer to the senior student is a condensed program to complete the requirements of his high school diploma. Providing the student has completed the 32 series of his vocational education course, and has compiled a minimum total of 90 credits including his compulsory subjects, the student is eligible for admission to the condensed program. This program provides English 33, and Mathematics 23 and 33 and is of a two and one-half months' duration. The student is time-tabled into

alternately scheduled blocks and can complete two courses. The condensed program enables a student to obtain his high school diploma and enter the labor force if he chooses, two and one-half months prior to the end of the normal school year.

Personnel of the Associated Studies program have developed courses in the language arts, mathematics, science, and the humanities. Qualified and successful tradesmen and educators have provided inputs to these courses. Staff and students from the Department of Industrial and Vocational Education of The University of Alberta also provided valuable input and assistance with the curriculum content for the courses of the Associated Studies program. Although the Associated Studies program has been in existence for two years only, certain advantages are evident. These are: the rate of drop-outs has been drastically curtailed and a definite and positive esprit de corps exists among the students enrolled in the program. Based on feedback from students, vocational education teachers and employers who have hired these students, the objectives of the program are being met.

All-Day Programs

The vocational education programs since 1962 have been offered on a one-half day basis with the expressed intent that a student pursue academic studies for the remaining half-day. In September, 1967, St. Joseph Composite High School semesterized all the academic courses at the request of the Central Office administrators. When the decision to semester into a two-semester school year was made by the school administrators, vocational education courses were excluded and no consideration was given as to whether or not the semester plan would be

advantageous or disadvantageous to the courses that made up the vocational education programs in the school. As a result of scheduling vocational education courses over a 10 month school year, it was found that vocational education students suffered the following disadvantages:

1. Because vocational education students spent 50 percent of their available school time in skill development courses, these students had been excluded from elective and in some cases compulsory courses due to scheduling difficulties that were directly related to the amount of time spent in vocational education classes.
2. Work study programs with industry often had to be abandoned because of the limited amount of time that a student was able to spend on the job site. This time element was particularly evident in the construction trades where work crews frequently changed location and job site.
3. Production schedules within the vocational education shop were difficult to meet because two different classes were required to use the same facilities. The storage problem in these shops was particularly acute.
4. Both the vocational education teachers and administrators in charge considered the half-day program as a contributing factor to attendance problems in academic classes. Students who were dressed to work in the shop were reluctant to attend academic classes in their working clothes.
5. As a result of all the above problems inefficiencies were identified in the utilization of time, finances, facilities, equipment and personnel.

In September, 1975, selected vocational education courses were piloted on an all-day basis. Involved in the pilot project were the automotives, welding, building construction, electronics, electricity and the pipe trades programs. The pilot project was conducted for the school year 1975-76 and included both 12/22 (junior) and 32 (senior) students.

In September of 1976, following a meeting of vocational education teachers, at which time a preliminary evaluation was made of the pilot project, the principal of the school and the assistant principal in charge of the vocational education programs submitted a written report on the project to the Trustees of the Edmonton Catholic Schools. In part, this report (1976) stated the following:

1. Industrial Division - Automotives, Electronics and Welding are all-day programs. There has been a marked increase in registrations with all classes over-enrolled in relation to facilities. An additional automotives teacher and welding teacher have been hired to supplement the existing staff. Lack of facilities curtail further expansion and increase in enrolments.
 2. Construction Division - Building Construction, Electricity and Pipe Trades are all-day programs. Building Construction and Electricity have reached an all-time high and are over-enrolled. Pipe Trades has shown a marked increase with very few vacancies remaining.
 3. Media and Communications Division - Drafting and Performing Arts are all-day programs. Drafting is over-enrolled and Performing Arts has increased with limited openings available.
- Commercial Art, Graphic Arts and T.V. Crafts have remained on a half-day basis and there has been no appreciable change in enrolment patterns. Vacancies exist in all of these areas. There has been a reduction of one teacher in the T.V. Crafts area.
4. Services Division - Beauty Culture and Horticulture are on a full-day basis. Beauty Culture is heavily over-enrolled and one new teacher has been added to this area. Horticulture enrolments have remained stable.

Food Preparation and Health Services are offered on the half-day basis and in both cases there has been a significant decrease in enrolments. (pp. 1-2)

As a result of the success of the all-day program, with the exception of Food Services, all programs have adopted the all-day format. The decision for a change from a half-day program to an all-day program in format was teacher-initiated. Because of production and storage limitations, the Food Services program elected to remain as a half-day program.

Work Experience and Work Study

The implementation of all-day vocational education programs made the next stage of improving the vocational education programs possible. It was a firm belief of staff and administration that industry must share in the education of our youth, especially those who had elected to prepare for a career in the world of work by completing a vocational education program of study.

For some years students at St. Joseph Composite High School had the opportunity to enroll in either the Work Experience program or the Work Study program. Work Experience is an accredited course offering and is listed under the regulations of the high school handbook as Work Experience 25 and Work Experience 35, each of which could be offered for a total of up to five credits. By permitting a student to enroll in both courses simultaneously, it was possible for a student to spend one-half day out of school in a working environment. There is no regulation which states that the student in Work Experience receive remuneration. Employers in most cases do offer a nominal sum to the student.

Work Experience is used largely as an orientation mechanism to expose the student to the world of work and hopefully through this exposure assist the student to make a wise career decision.

Cooperative Education

In recent years industry and technology have grown at an ever accelerating rate. The design, operation and complexity of a vast array of new tools, machines and procedures in industry have made it almost impossible for education to keep abreast of and offer all the manipulative skills needed by skilled workers in business or industry. In addition, there are certain aspects of every occupation that can only be learned on-the-job. The only foreseeable way that vocational educators can bridge this "skill development gap" is not by a large influx of capital to re-equip the schools, but to expand and broaden the learning experiences of their students by involving industry in cooperative education.

The traditional image of secondary school vocational education has been that of a school situation where students spend half of their day taking a complement of academic courses such as mathematics, science and English. The remaining half of the day the student spends taking vocational education courses where they learn entry level skills for the world of work. The intent of adding another phrase or term to the list of jargon used by educators was to bring attention to a program that would expand a student's education beyond the walls of the school. This education and training would be conducted under the cooperative sponsorship of both the school and industry. The term cooperative education was an outgrowth of the direction vocational education was

to take at St. Joseph Composite High School.

Another variation that was used by the vocational education teachers at St. Joseph Composite High School was to release vocational education students to industry for a fixed period of time, in most cases for six weeks, in a job situation that was directly related to the student's program of studies. Although this variation of work-experience was termed the Work Study Program, this terminology is not necessarily synonymous with similar programs that are offered by other high schools throughout the province.

Cooperative education at St. Joseph Composite High School can simply be defined as an arrangement between the school and members of the industrial and business communities where the student alternates his time between school and industry on a series of jobs related directly to the student's occupational field of study.

While in school the student acquires the theoretical portion of the trade and certain basic manipulative skills. When the student is on-the-job in industry, the student is expected to apply the knowledge and skill that he has acquired in the classroom. The on-the-job learning experiences are supervised by both the student's vocational educational teacher and the employer in an effort to provide the student with the opportunity to bridge the gap between formal education and the world of work. Minimum wage rates are paid by the employer to the student so that the student is not inconvenienced in meeting incidental expenses such as transportation.

Objectives of the Cooperative Education Program

Cooperative education has been designed primarily to assist

the student;

1. to obtain direct employment;
2. to obtain a high school diploma while at the same time prepare for a career;
3. to obtain advanced standing in the apprenticeship program of Alberta;
4. to make a career decision which may influence the student to pursue further education at St. Joseph Composite High School, university or other post secondary institutions.

Establishing Criteria for Cooperative Education

In September of 1975, the administrator of the vocational education section invited the executive and interested members of the Edmonton Housing Association to a meeting. The purpose of this meeting was to examine the feasibility of involving this Association in cooperative education. The concept of cooperation was accepted by the executive and members of the Association and the school administrator. The following criteria for cooperative education were established:

1. Students must receive relevant academic and vocational instruction before being accepted on-the-job site. Only senior students registered in the 32 series of a program would be acceptable candidates, or students who have completed 20 credits of their vocational education program and the Associated Studies program.
2. Both in-school and industry activities must be supervised and planned by the school.
3. The amount of time spent in school and out of school must

not be legislated by the administration. Time arrangements for cooperative education were to vary according to the needs and dictates of each individual occupational area with the best interests of the student held uppermost.

4. Employers were to encourage each student to complete all the requirements of a high school diploma after completing the industrial phase of cooperative education. Cooperating employers were to refrain from offering students full-time employment at the expense of the student completing the requirements for the high school diploma.
5. Students were to be rotated between employers and no employer was to retain a student once the student had reached an acceptable level of performance.
6. The student was to be "hired on" as an employee with full benefits and privileges of any full-time employee. Students were subject to dismissal for non-performance of assigned duties. The minimum remuneration that the student was to receive was the minimum wage rate for the trade. This rate of pay was in no case to exceed the starting apprenticeship wage for that particular industry.
7. The hours of work for the students were to coincide with those of other tradesmen with the maximum set at eight hours a day.
8. The responsibility for transportation to and from work rested solely with the student.

Cooperative Education Pilot Project

The first cooperative education pilot project was initiated in October of 1975 according to the criteria previously outlined, and involved 97 students from Building Construction, Electricity and Drafting classes. Sixty-seven participating employers attended a meeting at the school with the administrator of vocational education and the three involved teachers. It was agreed that flexible work and school schedules be developed that would coincide with the requirements of the employers and also of the school. The pilot project was to run a minimum period of three months, at which time a review of the entire project was to be made. Prior to the three-month deadline, the cooperating employers took the position that a review was not necessary and it was agreed by all parties to extend the pilot project to January 27, 1976, which was the end of the first school semester.

The in-school learning activities for the various vocational education classes involved required different schedules.

The Building Construction class set Monday as the day that it would hold theory and the day to review problems that were encountered in the field. The balance of the week was spent by Building Construction students on the job-site. Students in the Electricity class established Monday and Friday as normal school days. The Drafting students began the pilot project with two days in school and three days in industry. Because the drafting teacher felt that his students were not receiving sufficient theory, the pattern was changed to two days in industry and three days in school. Almost all students involved in the pilot project worked Saturdays for their cooperative education

employers during the time that the project was in effect. A number of students involved in the cooperative education pilot project also held part-time jobs. These students terminated that employment in favor of cooperative education.

The students were placed with an employer for a three-week period of time. At the end of this work period, the students were rotated to a new employer. Occasionally, the employer asked for a time extension, especially when a particularly keen student was involved.

Industry members established pay schedules according to the established criteria. In a number of instances student wages exceeded these criteria and the administrators informed those employers that they were too generous with the wages paid to students. In the pilot study not one employer attempted to influence a student to quit school in favor of a job. One failure resulted in the 97 students who were in the cooperative education program. Of these 97 students, 96 were offered jobs by the employers after they completed high school.

Results of the Pilot Study

Benefits have accrued in many ways to students, the school, its teachers, industry, and to the community at-large since the cooperative education program was first piloted. The advantages to each constituent group are:

Advantages to the Student

1. Students develop a healthier and more positive attitude to work.
2. Students are motivated to remain in school and to enroll

in courses that are meaningful and related to their future occupation.

3. Students have a sampling of the job requirements and are ready for the world of work.
4. Cooperative education provides those students involved with this program a realistic view of career opportunities in a selected occupation.

Advantages to the School

1. Attendance problems with vocational education students have diminished considerably.
2. Teachers who serve as job supervisors have the opportunity to upgrade themselves by gaining first-hand knowledge of the latest developments in industry.
3. The morale of teachers has increased in that they can witness their students at work in industry.
4. The financial outlay of the school to purchasing new updated equipment and supplies is considerably lessened because the student has the opportunity to use the latest equipment on-the-job.
5. Because of the relevancy of cooperative education to career education selection, the career guidance function of the school is greatly assisted.
6. All school personnel including academic teachers, and not only vocational education teachers, have the opportunity to be in touch with the work world through cooperative education. Industry has become a source from which can be drawn

speakers, advisors and school supporters who are available to the school.

Advantages to Industry

1. Industry and business have carte blanche into the education system where they present input into the system.
2. Industry has a source of committed, educated and partially trained workers that it may draw upon in the immediate future.
3. Industry and business have an opportunity to present their role in society to today's youth.

Advantages to the Community

1. Cooperative education leads to stability in the community by providing students with job training and employment in the community in which they reside.
2. Cooperative education promotes better understanding between the home, school, industry, and the community at-large.
3. Cooperative education assists in bridging the gap between the world of work thereby reducing the numbers of individuals who may become dependent upon the community for financial assistance.

Growth of Cooperative Education

The cooperative education program of the school has grown in size since 1975 when it was introduced into the vocational education programs. During the 1976-77 school year, Pipe Trades, Horticulture, Beauty Culture, Welding and Performing Arts became involved in the cooperative education program of the school. Although the program has

continued to grow, the program should expand further but that expansion is limited by the amount of administrative time that can be devoted to the following: the organization of the cooperation education program requires that the administrator in charge to be away from the school on many occasions to hold either day or evening meetings with various employer associations involved. Although the labor unions have been generally supportive of the concept of cooperative education a small number of unions and some individual members of larger unions, who feel threatened by vocational education students, have placed unnecessary stumbling blocks in the way of the program.

To illustrate, in one extreme case, a shop steward had called all of the workers off a job because the "student worker" had borrowed a wrench from one of the regular full-time employees. The union agreement with the employer stated that all workers must possess their own set of hand tools. When the administrator of the school appeared on the scene at the request of the employer, he pointed out to the shop steward that the union contract did not specify the types of hand tools which an employee must possess and furthermore, the workers on the job readily admitted that the lending of tools was common practice in that particular organization. After some minutes of argument and deliberation, the employees were ordered back to work.

Each trade has some unique situations that may pose unforeseen problems that may hamper the implementation of a cooperative education program. For example, the automotive dealerships do not have a uniform basis of pay for mechanics. Some firms pay their mechanics a wage, while others operate on a piece-work basis. Where mechanics are paid

on a piece-work basis, it is next to impossible to place a student with this mechanic because the employee and not the employer must bear financial loss when the work of the mechanic is slowed down to teach the student a new skill or process. The concept of cooperative education is viable and worthwhile and in the opinion of the teaching staff of the vocational education section of the school, it is considered the focus of vocational education. Barring a sudden downturn in the economy, it is expected that cooperation will expand and flourish.

Chapter 5

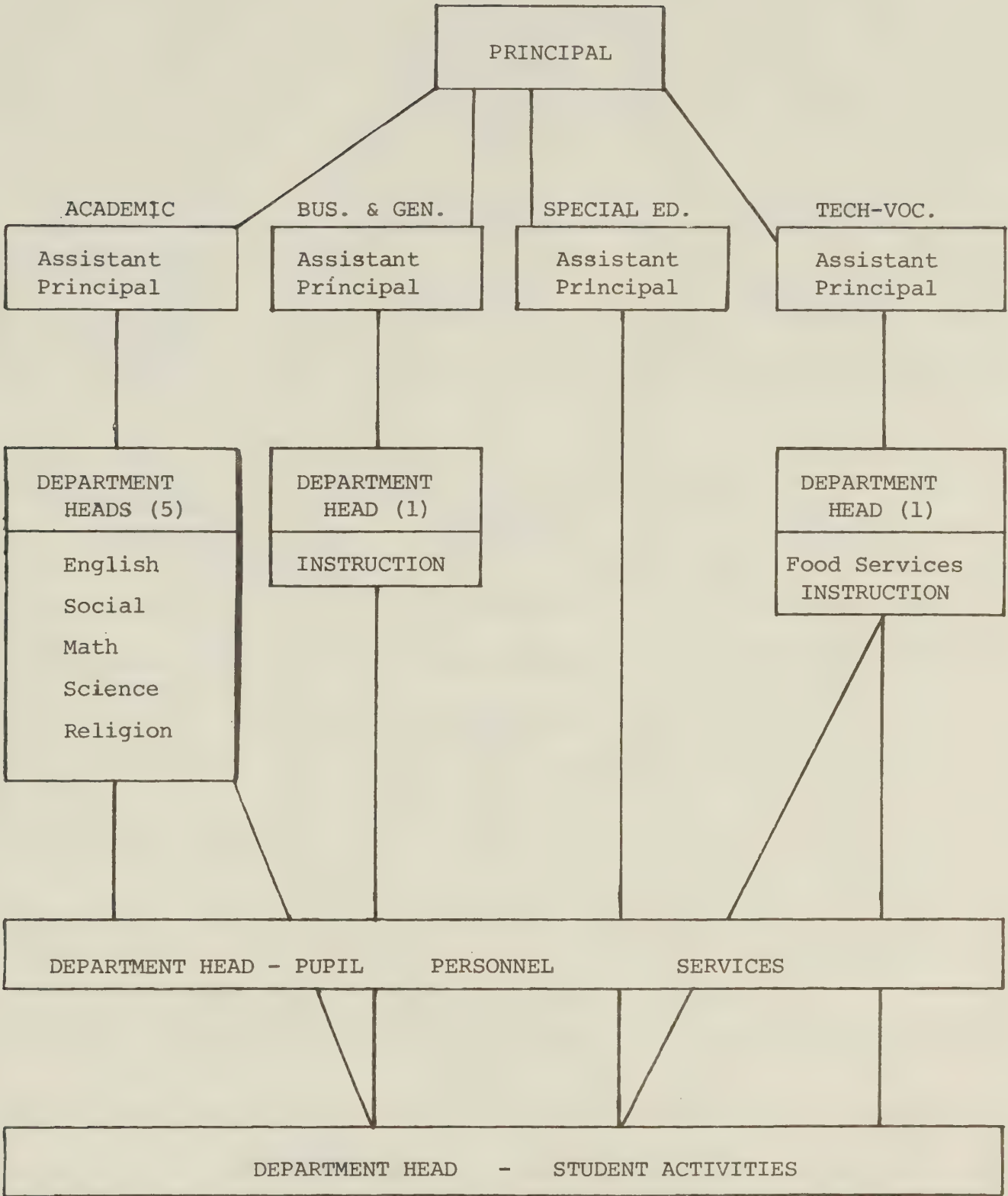
RECENT CHANGES IN THE ADMINISTRATIVE STRUCTURE

Background Information

As early as 1975 there was discussion about changing the administrative structure of the school. Historically, the school had undergone a number of changes in both structure and function. The school was first intended to serve solely a male population, and evolved into two schools within one school when the decision was made by the Board of Trustees that a female population should also be served. At that time, two school principals were appointed - one for the boys and the other for the girls. This administrative structure did not work very satisfactorily.

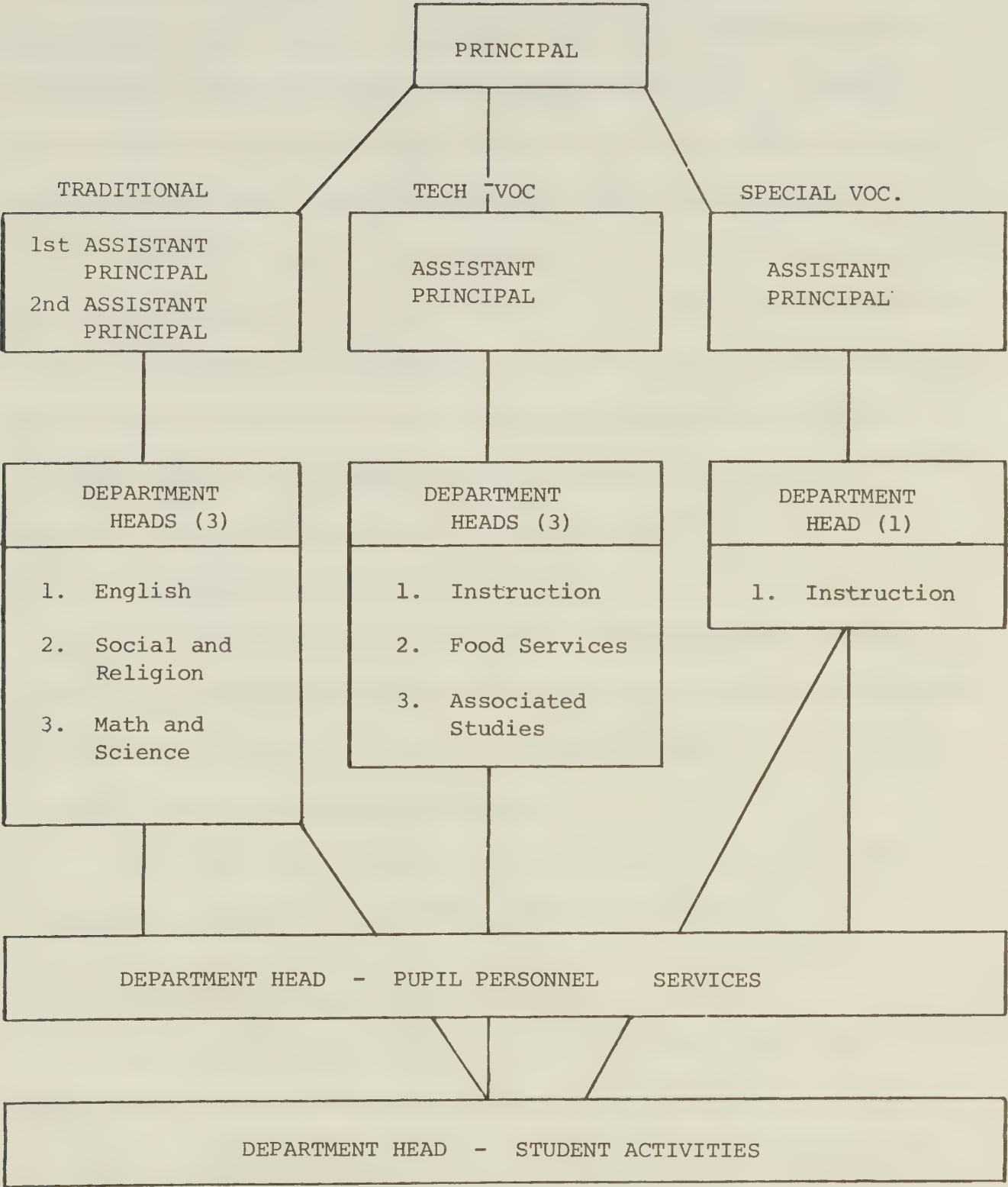
When vocational education was brought into the school in 1962 and special education in 1967, the school had an administrative structure of one principal and four assistant principals. One assistant principal was responsible for the operation of the special education section. The remaining three assistant principals were required to divide the other duties and responsibilities equally among themselves. To fulfill that division of duties a series of administrative experiments were attempted, such as having one assistant principal handling all attendance and discipline problems while the other two assistant principals divided the remaining responsibilities. Another administrative experiment involved a division of administrative duties whereby each of the three assistant principals were placed in charge of a grade

Chart No. 1



Administration Organizational Chart of
St. Joseph Composite High School
1968 to 1975

Chart No. 2



Administration Organizational Chart

St. Joseph Composite High School

September 1975 to Present

level, Grade 10, 11 or 12. The assignment of an assistant principal to a grade level also proved unsatisfactory and finally the school was divided into four sections according to programs: academic, business and general, special education and technical-vocational. Chart No. 1 is an organizational chart of the school from 1968 to 1975. Chart No. 2 is an organizational chart from September 1975 to the present.

Chart No. 1 depicts the responsibility of the principal over the entire school operation. The responsibility of each discrete school or section is delegated to an assistant principal who performs a line and advisory function for the courses taught within his or her school. With the exception of the special education section, all assistant principals have the assistance of department heads, one each in the technical-vocational and business education sections and five in the academic section. Student activities and Pupil Personnel Services department heads are required to assist all the four sections that comprise the total school. Solid lines indicate authority lines and do not refer to student program or choices.

Chart No. 2 is very similar to Chart No. 1, with the exception of depicting changes in department heads organization.

Faculty Council and School Administration

The administrative organization of the school made provision for a Faculty Council which was comprised of all subject area department heads. The Faculty Council met bi-monthly for the purpose of discussing school related problems and to make recommendations to the administration of possible solutions to problems. As can be readily seen on Chart No. 1, there was an imbalance in representation of

department heads on Faculty Council. Enrolment statistics for the school was approximately equal to that of the Technical-Vocational Section, but representation of staff on Faculty Council from these sections was five to two respectively. Student enrolment in the Business and General Section was about twice that of the Special Education Section, but the latter was not represented on Faculty Council although the special education staff was approximately 12 percent of the teaching staff of the school. Because of these representational inequities, staff morale in those sections with no representation to Faculty Council, was low. In an attempt to maintain more equal representation by section on Faculty Council, the senior administration of the school redefined the roles of department heads. The senior administration also felt that it was necessary to maintain Faculty Council as a means of keeping open the lines of communication between staff and administration. In September 1976, the academic, the business, and the general sections of the school were merged into one section and renamed the "traditional" section. At this time the administrative structure of the school was changed so that there were three department heads from the technical-vocational section and one from the special-vocational section. Chart No. 2 shows the administrative structure of the school that has been in effect from September, 1976, to the present (1978).

Chapter 6

NEW DIMENSIONS FOR VOCATIONAL EDUCATION

The new dimensions for vocational education which developed at St. Joseph High School established the Technical-Vocational Section as an autonomous alternate high school operating cooperatively with the traditional high school housed within the same facility and with all other high schools of the Edmonton Catholic School System. These new dimensions were brought about by changes in the structure and function of the administration of the school as well as changes that were effected within the vocational education programs and changes and modifications that were made in academic courses through the Associated Studies program. Lastly, the new dimensions involved industry into the educational process through its inclusion in the cooperative education program. This chapter summarizes those major areas of change that have led to New Dimensions for Educating Vocational Education Students at the Secondary Level and offers observations and recommendations for further action and change.

THE ADMINISTRATION

Administration can be thought of as consisting of two components: namely, structure (organization) and function (process). The organization component deals with the development of a plan or structure through which the purposes of an organization can be realized, and was previously discussed in Chapter 5. Function or process is concerned with the conduct, operation and control aspects so as to ensure that

the organization's purposes will be realized. The two components are complementary and are the responsibility of the administrator.

The administrative functions that are directly related to the Technical-Vocational Section such as: planning, scheduling of student programs, curriculum development, attendance and finance are under the direction of an assistant principal who is assisted by three-half time department heads. A full-time secretary is assigned to do the secretarial work of the section although there is provision whereby in case of an overload, additional secretarial assistance may be drawn from the secretarial pool of the school. The accounting and inventory control of the Technical-Vocational Section are the responsibility of the business manager. The business manager is assisted by two clerks.

Financial Decentralization

The School Board operational grants for the school are operated through a centralized accounting system and the school is given an allotted amount of credit which it can draw upon. The exceptions to this system are both the Technical-Vocational Education Section and Special Education Section operational grants. Monies for these two sections are received by the school with the actual accounting procedures carried out by the business manager of the school. One problem that the administrator of the vocational education division had to face was that he did not have any direct input into the amount of entitlement of these monies even though enrolments in vocational education were on the increase. The total amount of money allotted for vocational education had remained constant for a period of years, and in one instance was cut back. This lack of foresight and consideration on the

part of those responsible for the dispersement of funds made planning and management of all vocational education programs more difficult.

After several meetings with personnel from Central Office a formula of operational grants to the school was established. The grant that was paid to the school for all sections in 1976 reflected enrolments in each section and was based on a percentage of credit enrolment units. This measure provided the necessary incentive for administration and staff to promote vocational education programs.

Another area of concern was the replacement and upgrading of capital equipment in the vocational education shops. Many of these shop areas were opened in 1963 and the equipment in these shops was becoming obsolete because of the many changes that occurred, changes such as: tool design changes; tool usage in industry, engine design changes; curriculum changes; changes in methodology; and changes in the measurement system to the International System of measurement. Little thought about these problems of change was considered by either government or the School Board because neither had set aside monies to update facilities and equipment. An appeal was made by the school administrators directly to the Board of Trustees who recognized the urgency and obvious merit of the request for funds and allocated the sum of \$350,000 to be paid in five equal annual installments to the school for updating the vocational education shops. In September, 1974, the first of these five payments was received by the school. Vocational education staff and administrators in this final year of the five-year plan are drawing up plans to update that remaining equipment which is considered obsolete or that has to be replaced.

TECHNICAL-VOCATIONAL PROGRAMS

Technical-vocational education programs are divided into two sections: the 12/22 section, which is referred to as the junior program and the other is the 32 section, which is referred to as the senior program. Programs are offered on a full-day basis with the exception of the Food Services program which is offered on a half-day basis. To complete a 12/22 and 32 program on the full-day basis requires a time period of 10 months.

Eligibility for Enrolment

Any student who wishes to enroll in a vocational education program must have completed a minimum of at least 20 academic credits at the Grade 10 level. In addition, the student must provide evidence of carefully investigating a career field and should display a sincere desire to pursue an occupation. Guidance personnel of the school or the assistant principal of the Technical-Vocational Section make an assessment of a student's suitability for a specific vocational education program. This assessment is made after the administrator or vocational education teacher personally interviews the student and, if necessary, refers the student to other sources to obtain further information on a particular occupation. T.V. career guidance films, questionnaires, printed literature and orientation seminars on vocational education programs are readily available to all students.

Students who have left school early are also eligible to enroll in vocational education programs on the following conditions: they must have been out of school for at least one semester, they must be

over the age of 16 and they must have been referred by either the Pupil Personnel Department of St. Joseph Composite High School or from any other high school within the Edmonton Catholic School System.

Attendance Policy

Due to the various components that make up vocational education programs it is considered essential for students to attend classes on a regular basis. Parents of students who are absent from class for three days or more are contacted by the classroom teacher. On the fifth day of absence a letter is sent by the administrator in charge to the parents requesting their assistance in rectifying this situation. Should the student continue to be absent for 10 days the parent receives a letter which requests that they attend an interview with the administrator in order to find a possible solution to the problem. Normally at this stage, the student's absenteeism either ceases or the student is redirected into a program that is better suited to meet the needs and abilities of the student.

Should no attempt be made by the parents to attend the interview with the administrator and the absence of the student continues, the student is referred for guidance and in the more extreme cases, the student is required to withdraw from school. The restructuring of the vocational education programs at St. Joseph Composite High School has done much to alleviate attendance problems.

The last few years attendance has ceased to be a major problem for the vocational education teachers and the administrator in charge of the Technical-Vocational Section.

Program Costs to the Student

For students enrolled in vocational education programs, all textbooks and reference material are provided under a textbook rental plan which the student pays and all tools and materials for the program are provided by the school. The responsibility of providing suitable clothing to wear in the vocational shop rests with the student. In programs such as automotives, beauty culture, food services, and welding, it is necessary that the student purchase and wear clothing that is prescribed by the school authorities.

Public Relations

It is felt that public relations, directed towards student, parents, business and industry, and to the community at-large is necessary and vital to the successful operation of technical-vocational education programs. Many public relations methods have been used over the past years to accomplish this end. Below are a list of those activities and methods that have been employed during the past year and remain in effect.

1. A series of television productions entitled, "St. Joseph Report", have been aired a number of times as a weekly program over Cable Channel 13. These programs portray the vocational education offerings at the high school. In 1978, there were 15 programs each 15 minutes in length which explain the various vocational education programs by showing on film students engaged in the various learning activities in their respective shop areas. In addition, the cable company provides the opportunity for any viewer or

prospective viewer to call in and request a specific program be reshowed at a mutually agreed upon time.

2. During the 1977-78 school year, for the first time, a covering letter and a brochure of all vocational education programs was mailed to every parent or guardian of each Grade 10 student in the Catholic School System. This letter advised these individuals of the availability and purpose of the vocational education programs. In addition, a schedule of T.V. programs previously mentioned was included in the letter.
3. An open-house is held in each semester for all the parents whose children are enrolled in the vocational education or in the Associated Studies programs. A general meeting is held with the parents where they meet the administrator of the Technical-Vocational Section and the vocational education teachers and are informed of the role, purpose, requirements, and policies related to their son's or daughter's enrolment as a vocational education student. Following a question-and-answer period and coffee, all participants are invited to take a tour of the specific vocational education area of their choice where teachers provide specific information on the course.
4. An open invitation exists for any individual who wishes to visit the school. Following a phone call, a knowledgeable member of staff is assigned to escort the visitor through the school and answer any questions about the programs or

the school. Hardly a day passes without a group visiting the school and, over the past few years the Technical-Vocational Section has been visited by delegations from Russia, Japan, Thailand, Sweden, Germany, African countries, Carribean countries, the United States, as well as from all parts of Canada.

5. Orientation and visitation days for interested incoming students have been the norm for a number of years. Interested students in every high school within the Edmonton Catholic School System are visited by the administrator of Technical-Vocational Section at St. Joseph Composite High School. During these visits vocational education programs are discussed, printed literature which describes these programs is handed out and any student who wishes to explore the vocational education offerings is permitted the opportunity to spend an entire day as an auditor in the vocational area of his choice. This activity has worked well and a significant number of students who have visited the school have enrolled into one of the vocational education programs.
6. Employers who are associated with the school through the cooperative education program are invited to attend an annual informal banquet in recognition of the contribution they have made to both the students and the staff of the school. This event has proven to be a highlight of the year in the eyes of the employers and the staff.
7. In the past very little was done to make the facilities of

the school available to employers. This past year an experiment was launched that involved industry in a Metrication Seminar which was offered by the vocational education staff of the school. One hundred and twenty-five individuals attended this Seminar. The Seminar was very successful and other seminars for employers and employees of various business and industrial establishments throughout Metropolitan Edmonton will become a normal event in the upcoming years.

8. Printed information on all aspects of the vocational education programs have been made available to students and parents and include: guidance material, information on specific curriculum matters, reports of programs and promotional material. The copy for these materials originates from teachers, students, administrators, or from printed publications from across the country. Suitable and appropriate information is inserted into correspondence that is mailed from the school.
9. Last but not least, it is recognized that the best public relations is generated by the students themselves by word of mouth.

ASSOCIATED STUDIES

Associated Studies is a school-designed program of academic courses that are directly related to careers that are included in the Industrial and Construction and Fabrication Divisions of the Technical-Vocational Education Section. Specifically, the Industrial Division

includes the trade areas of automotives, electronics and welding, and the Construction and Fabrication Division encompasses building construction, electricity and pipe trades. The purpose of Associated Studies is to relate theory to practice and the studies focus upon language arts skills, practical mathematical skills, the applied sciences, and the social sciences. Modifications and changes have been brought about in the curriculum of these academic subjects. Every attempt is made to make these courses relevant to the needs of the student in relationship to his or her career choice.

Feedback received from students enrolled in the Associated Studies program indicates a definite advantage to these students. At the request of the assistant principal in charge of vocational education, M. J. Hertz, a member of the Pupil Personnel Services of the school conducted a study which was presented to the staff of St. Joseph Composite High School on March 23, 1977, and was included in a report to the Board of Trustees of the Edmonton Catholic School System in April, 1977.

COOPERATIVE EDUCATION

The cooperative education program is an outgrowth of a desire by the technical-vocational education administration and staff to expand students' education beyond the walls of a vocational education shop. Cooperative education is an arrangement between school and industry whereby a student alternates his attendance between school and industry on a series of jobs related directly to his or her occupational field of study. While in school the student acquires the theoretical

knowledge of the trade along with basic manipulative skills. While in industry the student is expected to apply the knowledge and skill that he has acquired in the classroom.

No attempt has been made by the administrator in charge of vocational education to formally evaluate the cooperative education portion of the school's vocational education program. Feedback has been received from students who were engaged in cooperative education and also from their employers in the form of letters, phone calls or personal contact. At the present time, eight of 15 vocational education programs of the school are totally involved in cooperative education. Involvement in cooperative education has been on a voluntary basis, and although there was some slight resistance to the concept originally, vocational education teachers not presently involved in cooperative education have begun to take a more positive attitude toward cooperative education.

OBSERVATIONS AND RECOMMENDATIONS

One fact becomes evident when one examines change. The process of change becomes unending and one facet of change necessitates further change, often as a result of events that are external to and internal to the institution in which the process began. Economic factors have changed the face of industry and there has been evidenced a trend away from the smaller specialized business organization towards larger, more comprehensive multifaceted operations. Advancing technology such as the increasing use of computers, electronic production equipment and the high degree of sophisticated specialized tools and equipment with

an increasing need for suitably skilled workers has accelerated the need for change in the manner and direction in which vocational education programs are offered. The increased emphasis on industrialization within the Province of Alberta dictates that students be exposed to and receive relevant training in a wider variety of opportunities.

FACILITIES

Many of the present vocational education facilities at St. Joseph Composite High School were built between 1962 and 1967 in accordance with the regulations of the Federal-Provincial Technical Training Agreement. A greater emphasis in vocational education programs of studies to integrate the theory of a trade with the practical skills of a trade have made the present facility arrangement inadequate. For some time there has been a growing concern among vocational education staff that the present facilities have been unable to accommodate the growing numbers of students wishing to enroll in many of the vocational education courses.

In recent years there has been a demand from both vocational education teachers and their students to expand the facilities and the curriculum in welding, automotives and building construction.

Original restrictions in the design and in the construction of small separate unit shops for most of the trades have resulted in freezing of enrolments at a predetermined figure. This has led to the duplication of facilities, equipment, tools, and supplies where there are two or more vocational education areas offering identical programs.

The administration of the school has been requested by members

of the Automotive Retailers to add a parts service program and an auto-body program to the present course offerings. Many students who have an interest in automotives do not possess the capability or desire to pursue apprenticeship as an automotive mechanic, yet have expressed the desire to pursue the autobody or parts service fields. Female students, few of whom have enrolled in the automotive program, have requested education in parts service.

Recommendations and Conclusions

It is recommended that the vocational education facilities at St. Joseph Composite High School be redesigned so as to enlarge the present areas, grouping identical and related areas into one large complex so as to meet the following objectives:

1. Provide the potential for accommodating more students in the welding program.
2. Increase the number of vocational education program offerings to include autobody, parts-service programs so as to better prepare the students for a greater variety of employment opportunities and for future training.
3. Reduce the long term capital and operational costs, per pupil costs through more efficient use of space.
4. Improve supervision and safety through more efficient use of personnel.

Blueprints and plans have been drawn up to accomplish the designed ends, but unfortunately outdated regulations of Alberta Education do not cover this type of proposal. Provincial regulations that presently exist provide monies for renovations only if a change of

function of the physical plant is involved, such as changing a classroom into a library. Funding from the province is not available for upgrading or enlarging facilities which will be used for the same purpose.

At the time of this writing, a proposal recommending a change in the present provincial regulations is being prepared for presentation to the Minister of Education. It is recognized that changes in the regulations would be costly but in the interests of educating more vocational education students more efficiently, it is hoped that Alberta Education will respond to this pressing need and not leave the responsibility for funding such renovations to local school authorities.

CAMPUS PLAN

Vocational education programs in the Edmonton Catholic School System have primarily been offered at St. Joseph Composite High School and to a lesser degree at the following two schools: Archbishop O'Leary and St. Mary High Schools. Many students who have completed junior vocational education programs at either of the latter two schools have elected to transfer their enrolments to St. Joseph Composite High School to complete their senior vocational education program. These transfer students have suffered through this transfer arrangement for the following reasons: they may not have had sufficient credits in their vocational education programs as a direct result of their transfer school being on the modular matrix mentioned previously, or their earlier vocational education experience was significantly different to the program that was offered at St. Joseph Composite High School so as

to make articulation of programs very difficult. Though the complete array of vocational education courses is the responsibility of the Director of Vocational Education at central office, it has been expressed by some administrators and vocational education teachers in all the schools that offer these courses, that the management and leadership role for vocational education should be assumed by the personnel at St. Joseph Composite High School. Placing all vocational education programs of the Edmonton Catholic School System under the management of St. Joseph Composite High School would carry with it many implications related to the role of the administration in all the affected schools, the operation of the business offices of these schools in relation to the purchasing of supplies and materials, and also to the role of the many vocational education teachers who would be directly affected by such a change.

RESTRUCTURING SCHOOL DAY, SCHOOL YEAR

Problems related to the school day and the school year have been identified since the inception of the cooperative education portion of the vocational education programs. The school day, as it is presently organized, was an outgrowth of the requirements of the traditional academic school whereby the length of the day was divided into a specified number of units to meet the requirements of the matriculation program of studies. The vocational education courses of study allow for more activity than is evidenced in academic courses and the time allotted in both cases should not necessarily be the same. If a part of vocational education is to be offered through cooperative education, the structure of the day should be reorganized to closer resemble

the working day of industry. A restructured and lengthened school day would have implications to the school year which could be shortened to the advantage of the students. The present school year terminates at a time which is not necessarily of the greatest benefit to the majority of students who graduate and who seek direct employment following graduation. It would be possible to restructure the year so that graduation would occur prior to the time that employment opportunities are most abundant.

A change in the school year and school day carries with it many implications related to administration, business office operations, custodial and maintenance services as well as contractual obligations between the Edmonton Catholic School System and The Alberta Teachers' Association.

ASSOCIATED STUDIES

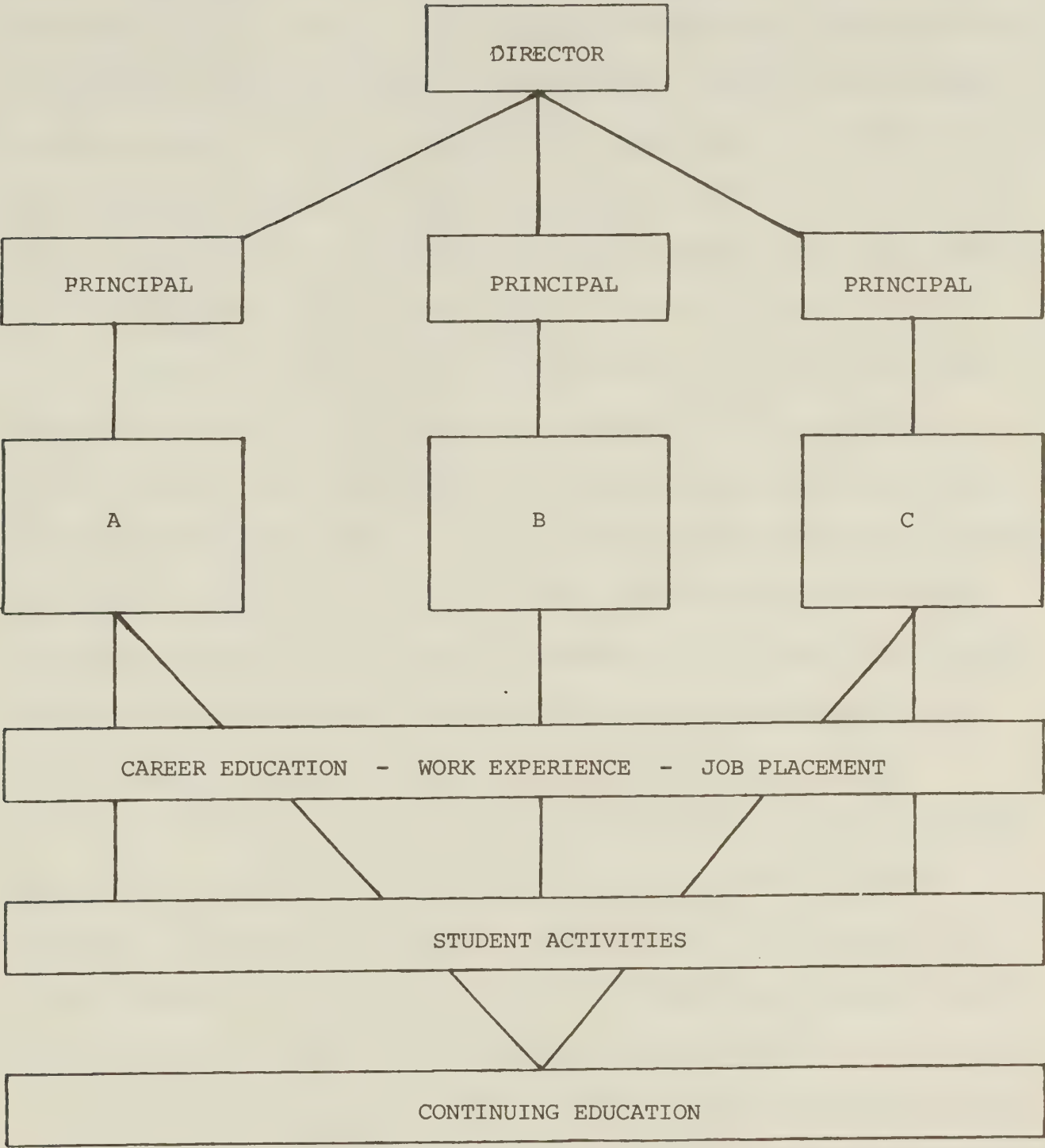
To date, the Associated Studies program is limited to students enrolled in the Industrial and Construction and Fabrication Divisions of the vocational education programs. Teachers of the other vocational education courses not served by the Associated Studies program have requested that immediate attention should be given to expand the Associated Studies program to include all of the vocational education courses being taught at the school.

RESTRUCTURING THE ADMINISTRATION TO ACCOMMODATE

CONTINUING EDUCATION PROGRAMS

Chart No. 3 is an organizational outline of a further proposed change in the administrative structure. The school would be further

Chart No. 3



Proposed School Reorganization

delineated into three distinct schools with a principal in charge of each school, under the directorship of a singular person. The three distinct schools would be: Traditional Academic School, Special Education School, and Technical-Vocational School. Student activities and pupil personnel services, both under the supervision of a division head, would provide services to each of the three schools. Continuing Education, a new division, would offer extension courses in both the academic and technical-vocational subject areas.

Informal discussions have been on-going from 1975 to the present between Dr. H. A. MacNeil, superintendent, and the principal of the school and the assistant principal in charge of the Technical-Vocational Section. These discussions were mainly of the brainstorming type, the purpose of which was to discuss ways and means of further improving the vocational education offerings in the school population and also of extending these offerings to the adult citizenry of the school district by implementing a continuing education section. Although the school system already operates a continuing education service through central office, it was felt that the school should be involved in programs of vocational education which were presently not being provided by central office. Due to the additional responsibilities that would be involved in operating such a comprehensive program of studies, the administrators of the school designed a structure that would change the designation of principal to director and elevate the assistant principals to a principalship in each of the three designated schools. The pupil personnel department would be enlarged to include, in addition to its present guidance function, the following: career

education, work experience and job placement. A new department of continuing education would be established which would serve not only the students enrolled in the schools at large, but also the adult population of the school district.

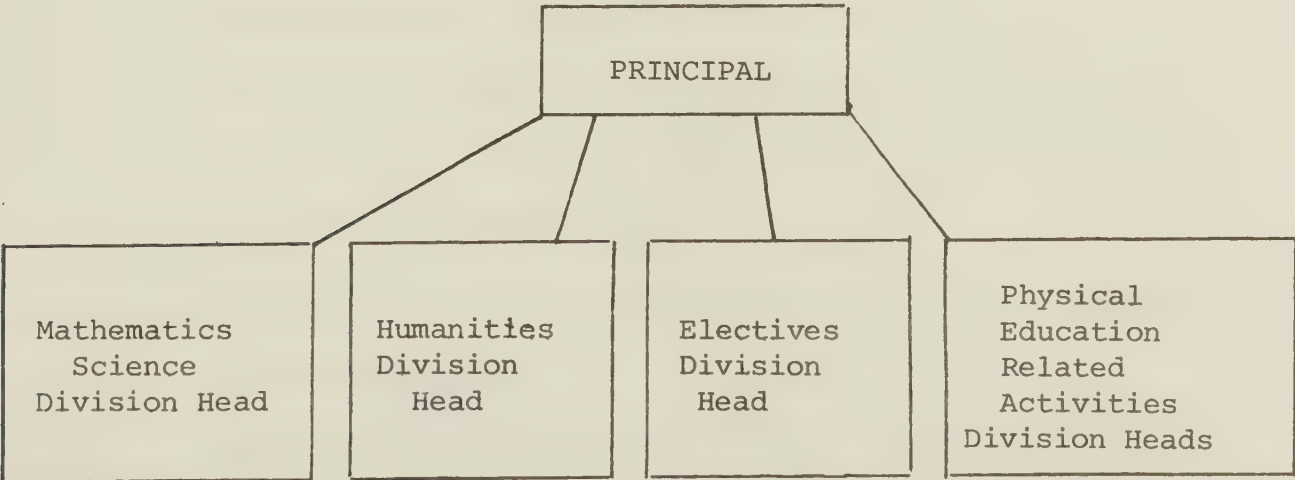
Each of the schools would operate within the same physical plant but each school would have a different purpose, organization, and curriculum focus that would attract students and staff of appropriate and mutually reinforcing interest. The principal and staff of each school would be expected to demonstrate a genuine understanding and support for the other schools within the school.

The present designations of department heads would be eliminated and would be replaced by division heads who would represent a cluster of related program offerings. These division heads would serve on Faculty Council.

Charts Nos. 4, 5 and 6 detail the administrative structure of each of the three discrete schools referred to in Chart No. 3.

Chart No. 4

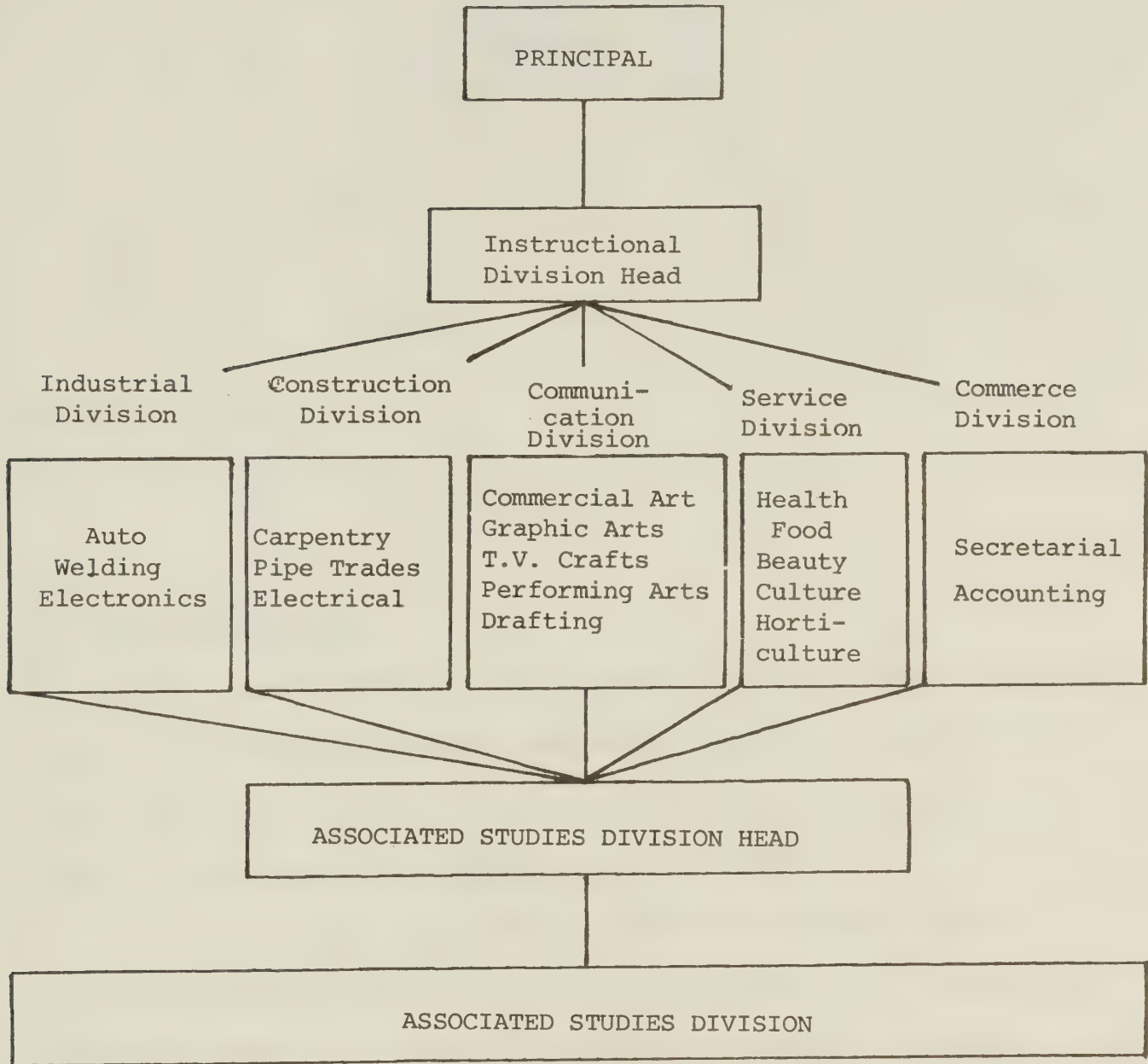
A. Traditional (Academic) High School - (Enrolment 600-700)



- designed to serve students for the inner-city community
- designate inner-city school boundaries so that other Grade 10 and 11 students remain at their local high schools
- permit open boundaries for Grade 12 students who may want to take advantage of the semester plan
- introduce and modify some programs to meet needs of New Canadians, inner-city students
- staff in accordance with other high schools
- an alternative school geared towards occupational fields and skills needed in business and industry
- open to serve entire metropolitan area for all wanting to learn
- the essential features would be:
 - (1) upgrading of instructional program
 - (2) delivery of academic component through an Associated Studies division
 - (3) broadening learning opportunities and exposures through cooperative education
 - (4) expanding career education and job placement services
- reorganize school day and school year
- integrating specific courses into a program division and each division would be funded, staffed, etc. on its needs as opposed to total school
- designed to serve entire metropolitan area for students encountering difficulty in regular school work
- students accepted only on a referral by central office Pupil Personnel Services

Chart No. 5

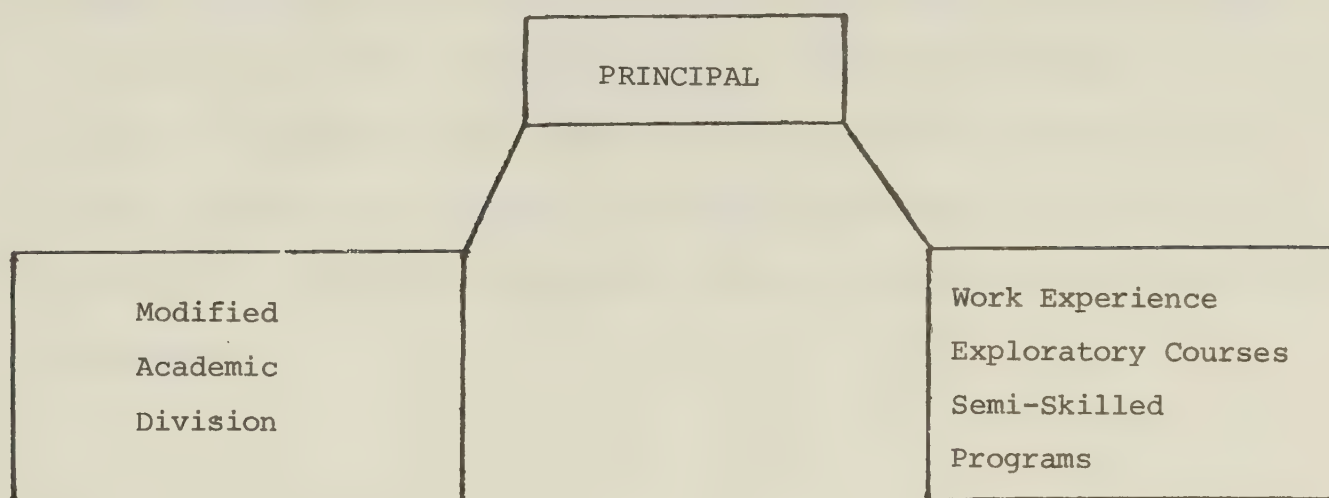
B. Technical-Vocational School (Enrolment 1,000)



- greater consideration on staff selectivity
- program would be considered terminal and those who could benefit from the vocational school would be referred to and encouraged to attend that school

Chart No. 6

C. Special Education - (Enrolment 200)

The Task of Evaluation

The future dictates the development of valid evaluation techniques and instruments so that the vocational education programs at St. Joseph Composite High School will be updated and revised to meet the needs of a continually and rapidly changing society.

To evaluate all the facets of vocational education that are provided in the New Dimensions that are in existence at St. Joseph Composite High School far exceeds the available resources of time and money. Factors and conditions of change both external and internal to the school have affected and will continue to affect the desired outcomes. Consequently, no comprehensive evaluation of vocational education as such is possible. The difficulty of conducting an objective evaluation of any educational work is also recognized. The results of

all education can only be evaluated in retrospect by evaluating the individual recipient of education's foibles and favors after the individual's life has terminated. However, it is recognized that specific facets of education can and must be evaluated and in this regard the limitations are those inherent in the instruments of measure. To this end it is recommended that administration, staff and students of St. Joseph Composite High School and industry become more involved in the process of evaluating all possible aspects of the vocational education programs.

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APPENDIX A

This appendix includes a sample copy of the questionnaire and the results of an in-house research study which led to the development and the implementation of the New Dimensions for Educating Vocational Education Students at the Secondary Level.

IV. The Questionnaire:S T U D E N T Q U E S T I O N N A I R EF O R M I

Dear Student:

This is the first in a series of three questionnaires you will be asked to complete over a period of six years. The purpose of the questionnaires is to gain a better understanding of your needs and aspirations and to evaluate the effectiveness of your vocational program. With your assistance, hopefully, we will have feedback information which will assist us in modifying the way the course is being taught and/or what is being taught.

After completion of your senior program, you will be asked to complete Form 2 of this survey.

Two years after completing Form 2, when you may be in employment, continuing a formal education, or for that matter wherever we may locate you, we will mail you Form 3 in which we will solicit your appraisal of the high school program and recommendations you may wish to offer for improvement.

We earnestly solicit your cooperation in completing the questionnaires because your experiences and successes will provide valuable information in keeping vocational courses abreast with the times.

May we thank you in advance for your efforts and support in this study.

Sincerely,

John D. Ritter,
Assistant Principal,
Technical-Vocational Section.

PERSONAL BACKGROUND INFORMATION

1. Your name: _____
2. Address: _____ Telephone: _____
3. Sex: Male: _____ Female: _____ Date of Birth: _____
4. Name of Father: _____
Address: _____ Telephone: _____
Occupation: _____ Place of employment: _____
5. Name of Mother: _____
Address: _____ Telephone: _____
Occupation: _____ Place of employment: _____
6. Name of Guardian: _____
Address: _____ Telephone: _____
Occupation: _____ Place of employment: _____
7. Name and address of close relative: _____

8. Do you live in a: home _____ apartment _____ townhouse _____
9. What is the highest level of your father's education?
_____ A. Elementary
_____ B. Junior high
_____ C. High School Graduate
_____ D. University
_____ E. College or post secondary institution

. . . continued

10. What is the highest level of your mother's education?

- _____ A. Elementary
_____ B. Junior high
_____ C. High school graduate
_____ D. University
_____ E. College or post secondary institution
_____ F. Don't know

11. Are you able to do extra work or study at home to improve your learning in this course?

yes: _____ no: _____ once in a while: _____

12. Do you belong to any club or organization or have you participated in extra-curricular activities in the past year, (music, sports, etc.)? Please list some of your extra-curricular activities for the past year.

13. Are you now working part-time? yes: _____ no: _____

14. How many hours per week do you spend on the job? _____

15. What is the nature of this part-time job? _____

position: _____ employer: _____

16. Did you have summer employment: yes: _____ no: _____

position: _____ employer: _____

EDUCATIONAL BACKGROUND

1. Name the school you attended last year.

2. How many credits have you completed to date? _____

3. What are the subjects you completed and what mark did you obtain?

<u>GRADE X SUBJECTS</u>	<u>MARKS</u>	<u>GRADE XI SUBJECTS</u>	<u>MARKS</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

4. Did you take any courses that you consider prepared you for this technical course? Name them.

5. What marks did you receive in the above courses?

6. Did you learn anything related to your chosen vocational program outside of the regular school program?

- _____ A. Correspondence
- _____ B. Evening course
- _____ C. Private tutoring
- _____ D. Working alongside a professional, industry, etc.
- _____ E. Hobby
- _____ F. Experience on a job

7. If you were doing the best you could, where do you think you would stand in your grade?
- _____ A. With the top group
- _____ B. Much above average
- _____ C. Somewhat above average
- _____ D. About average
- _____ E. Somewhat below average
- _____ F. Much below average
- _____ G. With the bottom group
8. Where do you stand in your grade now?
- _____ A. With the top group
- _____ B. Much above average
- _____ C. Somewhat above average
- _____ D. About average
- _____ E. Somewhat below average
- _____ F. Much below average
- _____ G. With the bottom group
9. How many days of school did you miss last year?
- _____ A. 0 - 5 days
- _____ B. 6 - 10 days
- _____ C. 11 - 20 days
- _____ D. 20 or more days
10. Did you ever fail any courses? Please list name of course and comment. _____
- _____
11. Have you ever been terminated from or have you quit school?
- yes: _____ no: _____ Explain _____
- _____

WHY DID YOU CHOOSE THIS COURSE?

1. If nothing stood in the way, which one of the following programs would you take?

_____ A. The general program
_____ B. The vocational technical program
_____ C. The matriculation program
_____ D. The business education program
_____ E. Technical matriculation program
2. What reasons influenced you most in choosing this particular course?

_____ A. Credits
_____ B. Interest or natural ability in the subject
_____ C. Job preparation
_____ D. Leisure time preparation and personal development
_____ E. Preparation for further studies
_____ F. Other (specify) _____
3. What other influence helped you decide to take this course?

_____ A. Parent
_____ B. Teacher
_____ C. Friend in high school
_____ D. Friend in post secondary school
_____ E. Counsellor
_____ F. Orientation and visitation program
_____ G. Other (specify) _____
4. Did you participate in the orientation program? (TV presentation in your school) yes: _____ no: _____

continued . . .

5. If your answer is yes to question number 4, did you find the orientation program helpful in deciding what technical course to take?

yes: _____ no: _____ a little: _____

Please comment: _____

6. Did you participate in the visitation program at St. Joseph Composite High School? yes: _____ no: _____

7. If yes, how would you evaluate this program?

good: _____ fair: _____ poor: _____

Please comment: _____

8. Do you feel you know your own interests and abilities well enough to decide about your future career?

_____ A. Very well

_____ B. Quite well

_____ C. Not too well

_____ D. Not well at all

9. In your own words explain why you enrolled in this course.

10. Do your parents agree with your choice of high school courses?

yes: _____ no: _____ don't know: _____

11. Why did you choose this school?

_____ A. Because of the wide variety of program offered

_____ B. Because of friends

_____ C. There was no other school available

_____ D. Because of the semester system

_____ E. I was advised by teachers and counsellors

_____ F. Don't know

_____ G. Other: specify _____

WHAT ARE YOUR ASPIRATIONS AND EXPECTATIONS?

1. Do you intend to complete both years of your vocational program?
 yes: _____ no: _____ don't know: _____
2. Do you intend to obtain your High School diploma?
 yes: _____ no: _____ don't know: _____
3. Do you intend to obtain your Senior Matriculation?
 yes: _____ no: _____ don't know: _____
4. Do you intend to continue your studies at a post secondary institution: yes: _____ no: _____ don't know: _____
5. What are your aspirations once your formal studies are completed?
 _____ Enter a career related to the subject studied
 _____ Use my leisure time more creatively
 _____ Other: specify _____

6. What aspect of this course are you most interested in or feel most competent at? (Each course can be broken down into subtrades.)

7. How important is it that the school prepare you for an occupation?
 _____ A. Very important
 _____ B. Important
 _____ C. Not important
8. Do you expect your present vocational program to prepare you for an occupation?
 yes: _____ no: _____ don't know: _____

continued . . .

9. What do you hope to gain from taking this course?

10. Have you decided on a career?

yes: _____ no: _____

11. If so, what career do you have in mind?

12. Do you feel that this career is related to the technical course you are presently enrolled in?

yes: _____ no: _____ somewhat: _____

13. How far do your parents expect you to go in school?

- _____ A. Finish high school
- _____ B. Beyond high school
- _____ C. Not finish high school
- _____ D. Don't know

14. Among your friends in school, how many are planning to finish high school?

- _____ A. All of them
- _____ B. Most of them
- _____ C. About half of them
- _____ D. A few of them
- _____ E. None of them
- _____ F. Don't know

EMPLOYMENT SITUATION

1. In view of the present unemployment situation, do you think the government should:

_____ A. Increase Unemployment Insurance Commission benefits
 _____ B. Extend the social assistance program
 _____ C. Put more money into retraining programs
 _____ D. An individual should be responsible for his own future
 _____ E. Other: specify _____

2. Who is responsible for finding me a job?

_____ A. Private industry
 _____ B. The government
 _____ C. The individual
 _____ D. Educational institutions
 _____ E. Other: specify _____

3. Do you think education will guarantee you job success?

yes: _____ no: _____ don't know: _____

Why? _____

4. In a brief paragraph, state your opinion about the state of society today and what the future holds for you.

V. Results of Questionnaire:

Within a six week period following the opening of school, the questionnaire was administered to 262 students enrolled in junior (12/22) vocational education programs. From an analyses of these questionnaires the following data were tabulated:

<u>PERSONAL BACKGROUND INFORMATION</u>		
	<u>PERCENT</u>	<u>NUMBER OF RESPONDENTS</u>
<u>Questions 1 to 9 (Page 8)</u>		
Occupation of Father - Professional	5.8	13
- White Collar	19.3	43
- Blue Collar	47.5	106
- Labourer	27.4	61
Educational level of Father		
- Elementary	21.4	51
- Junior High	32.4	77
- Senior High	17.2	41
- University	8.0	19
- Other Post Secondary	21.0	50
<u>Question 10 (Page 9)</u>		
Educational level of Mother		
- Elementary	19.1	44
- Junior High	39.2	90
- Senior High	30.4	70
- University	2.6	6
- Other Post Secondary	8.7	20

		<u>PERCENT</u>	<u>NUMBER OF RESPONDENTS</u>
<u>Question 11 (Page 9)</u>			
Are facilities such as to enable you to study at home?	- Yes	52.7	139
	- No	6.4	17
	- Sometimes	40.9	108
<u>Question 12 (Page 9)</u>			
Do you belong to Clubs or Organi- zations?	- Yes	51.7	135
	- No	48.3	126
<u>Question 13. (Page 9)</u>			
Do you work part- time?	- Yes	57.5	150
	- No	42.5	111
<u>Question 14 (Page 9)</u>			
How many hours per week do you work?	- Under 10	10.8	16
	- 10 to 19	25.7	38
	- 20 or over	63.5	94
<u>Question 16 (Page 9)</u>			
Did you have summer employment?	- Yes	72.1	89
	- No	27.9	73

EDUCATIONAL BACKGROUND

	<u>PERCENT</u>	<u>NUMBER OF RESPONDENTS</u>
<u>Question 3 (Page 10)</u>		
What types of subjects have you completed to date?		
- Matriculation	24.9	65
- General High School	44.1	115
- Remedial Program	18.4	48
- Not answered	12.6	33
What average did you obtain in the above?		
- 70 to 100%	5.7	15
- 50 to 70%	67.8	177
- Below 50%	5.7	15
- Not answered	20.8	54
<u>Question 4 (Page 10)</u>		
Did you take any pre- vious courses that helped prepare you for your vocational program?		
- Yes	54.1	139
- No	45.9	118
<u>Question 6 (Page 10)</u>		
Did you learn any- thing about your chosen vocational program outside of school		
- Correspondence	2.2	4
- Evening classes	2.2	4
- Private tutoring	2.2	4
- Working with professional	11.3	21
- Hobby	47.2	88
- Experience on job	34.9	65

NUMBER OF
RESPONDENTS

PERCENT

Question 7 (Page 11)

If you were doing your
best, where do you
think you would
stand?

- Top group	61.7	161
- Average	32.6	85
- Below average	5.7	15

Question 8 (Page 11)

Where do you stand
in your group now?

- Top group	31.9	82
- Average	53.7	138
- Below average	14.4	37

Question 10 (Page 11)

How many days of
school did you miss
last year?

- 0 to 10	40.7	103
- 11 to 20	25.3	64
- Over 20	34.0	86

Question 11 (Page 11)

Have you ever
failed a course?

- Yes	50.4	125
- No	49.6	123

WHY DID YOU CHOOSE THIS COURSE?

	<u>PERCENT</u>	<u>NUMBER OF RESPONDENTS</u>	
<u>Question 1 (Page 12)</u>			
If nothing stood in your way which program would you take?	- General	5.8	15
	- Technical	37.5	97
	- Matriculation	10.9	28
	- Business	5.1	13
	- Tech. Matric.	40.7	105
<u>Question 2 (Page 12)</u>			
What reasons in- fluenced you most in choosing your program?	- Credits	7.1	24
	- Interest	38.3	129
	- Job Prep.	30.3	102
	- Leisure Time	8.9	30
	- Prep. for ad- vanced studies	14.8	50
	- Other	.6	2
*(More than one answer was selected by some students.)			
<u>Question 3 (Page 12)</u>			
What other influen- ces helped you decide to take this vocational course?	- Parent	17.9	50
	- Teacher	9.6	27
	- Friend in High School	15.7	44
	- Friend in post secondary	2.5	7
	- Counsellor	8.9	25
*(More than one answer was selected by some students.)			

*(More than one
answer was selected
by some students.)

	<u>PERCENT</u>	<u>NUMBER OF RESPONDENTS</u>
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- Orientation program	7.5	21
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- Myself	37.9	106
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Question 5 (Page 13)

Did the orientation
program help you
decide what tech-
nical course to
take?

- Yes	11.1	28
-------	------	----

- No	77.1	195
------	------	-----

- A little	11.8	30
------------	------	----

Question 6 (Page 13)

Did you partici-
pate in the visi-
tation program?

- Yes	19.8	52
-------	------	----

- No	80.2	211
------	------	-----

Question 7 (Page 13)

How do you evaluate
the visitation
program?

- Good	57.7	30
--------	------	----

- Fair	40.4	21
--------	------	----

- Poor	1.9	1
--------	-----	---

Question 11 (Page 13/14)

Why did you choose
this school?

- Variety of programs	51.2	156
--------------------------	------	-----

- No other school available	2.3	7
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*(More than one
answer was selected
by some students.)

- Friends	11.8	36
-----------	------	----

- Semester	15.4	47
------------	------	----

- Advised by teacher or Counsellor	16.7	51
---------------------------------------	------	----

- Do not know	2.6	8
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WHAT ARE YOUR ASPIRATIONS AND EXPECTATIONS?

		<u>PERCENT</u>	<u>NUMBER OF RESPONDENTS</u>
<u>Question 1 (Page 15)</u>			
Do you intend to complete both years of your technical program?	- Yes	71.4	187
	- No	6.9	18
	- Do not know	21.7	57
<u>Question 2 (Page 15)</u>			
Do you intend to obtain a High School Diploma?	- Yes	92.2	235
	- No	1.6	4
	- Do not know	6.2	16
<u>Question 3 (Page 15)</u>			
Do you intend to obtain a Matriculation standing?	- Yes	13.9	36
	- No	54.8	142
	- Do not know	31.3	81
<u>Question 4 (Page 15)</u>			
Do you intend to go on to a Post Secondary Education?	- Yes	46.9	122
	- No	10.4	27
	- Do not know	42.7	111
<u>Question 5 (Page 15)</u>			
What are your aspirations on completion of formal studies?	- Enter related career	72.4	181

	<u>PERCENT</u>	<u>NUMBER OF RESPONDENTS</u>
--	----------------	----------------------------------

- Use of leisure	9.2	23
- Other	18.4	46

Question 6 (Page 15)

What are the most
interesting aspects
of this program?

- Known	59.9	157
- Not known	40.1	105

Question 7 (Page 15)

How important is
it that school pre-
pare you for an
occupation?

- Very important	49.6	130
- Important	40.5	106
- Not important	9.9	26

Question 8 (Page 15)

Do you expect your
vocational program
to prepare you for
an occupation?

- Yes	59.0	151
- No	14.5	37
- Do not know	26.5	68

Question 9 (Page 16)

What do you hope to
gain from taking this
course?

- Definite	53.7	138
- Vague	36.6	94
- Unknown	9.7	25

Question 10 (Page 16)

Have you decided on
a career?

- Yes	67.4	176
- No	32.6	85

	<u>PERCENT</u>	<u>NUMBER OF RESPONDENTS</u>
<u>Question 12 (Page 12)</u>		
Is the career you selected related to your technical program?		
- Yes	74.1	152
- No	12.7	26
- Somewhat	13.2	27
<u>Question 13 (Page 12)</u>		
How far do your parents expect you to go in school?		
- High School	51.9	136
- Beyond High School	37.8	99
- Not finish High School	1.1	3
- Do not know	9.2	24

EMPLOYMENT SITUATION

	<u>PERCENT</u>	<u>NUMBER OF RESPONDENTS</u>
<u>Question 1 (Page 17)</u>		
In view of the present situation the government should:		
- Increase employ- ment insurance	9.8	25
- Extend social assistance	17.3	44
- Have more re- training programs	44.6	114
- Individual should look after himself	26.3	67
- Create more jobs	2.0	5
<u>Question 2 (Page 17)</u>		
Who is respon- sible for finding you a job?		
- Industry	1.5	4
- Government	6.5	17
- Individual	77.9	204
- School	11.4	30
- Other	2.7	7
<u>Question 3 (Page 17)</u>		
Do you think education will guarantee you a job?		
- Yes	36.7	95
- No	35.7	92
- Do not know	27.8	72

PERSONAL BACKGROUND INFORMATIONQUESTION 1 to 9 (Page 1)

			<u>TOTAL</u>
Occupation of Father -	Professional	_____	13
	White Collar	_____	43
	Blue Collar	_____	106
	Labourer	_____	61
Education level of Father -	Elementary	_____	49
	Junior High	_____	77
	Senior High	_____	41
	University	_____	19
	Other Post Secondary	_____	50

QUESTION 10 (Page 2)

Education level of Mother -	Elementary	_____	44
	Junior High	_____	90
	Senior High	_____	70
	University	_____	6
	Other Post Secondary	_____	20

QUESTION 11 (Page 2)

Are facilities such as to enable you to study at home?	Yes	_____	143
	No	_____	17
	Sometimes	_____	110

QUESTION 12 (Page 2)

Do you belong to Clubs or Organizations?	Yes	_____	139
	No	_____	126

QUESTION 13 (Page 2)

Do you work part-time?	Yes	_____	154
	No	_____	112

QUESTION 14 (Page 2)

How many hours per week	Under 10	_____	16
do you work?	10 - 19	_____	39
	20 or over	_____	97

QUESTION 16 (Page 2)

Did you have summer	Yes	_____	193
employment?	No	_____	77

EDUCATIONAL BACKGROUNDQUESTION 3 (Page 3)

			<u>TOTAL</u>
What types of subjects have you completed to date?	Matriculation	_____	66
	General High		
	School	_____	119
	Remedial Program	_____	50
	Not answered	_____	32
What average did you obtain in the above?	70 - 100%	_____	17
	50 - 70%	_____	179
	Below 50%	_____	16
	Not answered	_____	54

QUESTION 4 (Page 3)

Did you take any previous	Yes	_____	139
courses that helped prepare you	No	_____	118
for your vocational program?			

QUESTION 6 (Page 3)

Did you learn anything
about your chosen vocational
program outside of school?

Correspondence	_____	4
Evening classes	_____	4
Private tutoring	_____	5
Working with		
Professional	_____	24
Hobby	_____	92
Experience on job	_____	70

QUESTION 7 (Page 4)

If you were doing your
best, where do you think
you would stand?

Top Group	_____	165
Average	_____	86
Below Average	_____	15

QUESTION 8 (Page 4)

Where do you stand in
your group now?

Top Group	_____	85
Average	_____	140
Below Average	_____	40

QUESTION 10 (Page 4)

How many days of school
did you miss last year?

0 - 10	_____	105
11 - 20	_____	65
Over 20	_____	88

QUESTION 11 (Page 4)

Have you ever failed a course?

Yes	_____	128
No	_____	125

WHY DID YOU CHOOSE THIS COURSE?

QUESTION 1 (Page 5)

		<u>TOTAL</u>
If nothing stood in your way which program would you take?	General _____	15
	Technical _____	97
	Matric. _____	28
	Business _____	13
	Tech. Matric. _____	110

QUESTION 2 (Page 5)

What reasons influenced you most in choosing your program?	Credits _____	24
	Interest _____	134
	Job Prep. _____	103
	Leisure Time _____	30
	Prep. for _____	
	Advanced studies _____	51
	Other _____	2

QUESTION 3 (Page 5)

What other influences helped you decide to take this vocational course?	Parent _____	50
	Teacher _____	32
	Friend in H.S. _____	48
	Friend in Post _____	
	Secondary _____	7
	Counsellor _____	25
	Orientation Prog. _____	21
	Myself _____	108

QUESTION 5 (Page 6)

Did the Orientation Program	Yes	_____	28
help you decide what techni-	No	_____	195
cal course to take?	A little	_____	30

QUESTION 6 (Page 6)

Did you participate in the	Yes	_____	52
Visitation Program?	No	_____	211

QUESTION 7 (Page 6)

How do you evaluate the	Good	_____	30
Visitation Program?	Fair	_____	21
	Poor	_____	1

QUESTION 11 (Page 6)

Why did you choose	Variety of		
this school?	Programs	_____	159
	No other school		
	available	_____	8
	Friends	_____	36
	Semester	_____	47
	Advised by teacher		
	or Counsellor	_____	52
	Do not know	_____	8

WHAT ARE YOUR ASPIRATIONS AND EXPECTATIONS?QUESTION 1 (Page 7)

Do you intend to complete	Yes	_____	192
both years of your techni-	No	_____	18
cal Program?	Do not know	_____	57

TOTAL

QUESTION 2 (Page 7)

Do you intend to obtain	Yes	_____	246
a High School Diploma?	No	_____	3
	Do not know	_____	16

QUESTION 3 (Page 7)

Do you intend to obtain a	Yes	_____	38
Matriculation standing?	No	_____	144
	Do not know	_____	82

QUESTION 4 (Page 7)

Do you intend to go on to	Yes	_____	123
a Post Secondary Education?	No	_____	27
	Do not know	_____	115

QUESTION 5 (Page 7)

What are your aspirations on	Enter related		
completion of formal studies?	career	_____	185
	Use of Leisure	_____	23
	Other	_____	47

QUESTION 6 (Page 7)

What are the most interesting	Known	_____	162
aspects of this program?	Not known	_____	105

QUESTION 7 (Page 7)

How important is it that school	Very important	_____	133
prepare you for an occupation?	Important	_____	108
	Not important	_____	26

QUESTION 8 (Page 7)

Do you expect your vocational	Yes	_____	154
program to prepare you for an	No	_____	37
occupation?	Do not know	_____	70

QUESTION 9 (Page 8)

What do you hope to gain	Definite	_____	143
from taking this course?	Vague	_____	94
	Unknown	_____	25

QUESTION 10 (Page 8)

Have you decided on a	Yes	_____	181
career?	No	_____	89

QUESTION 12 (Page 8)

Is the career you selected	Yes	_____	154
related to your technical	No	_____	27
program?	Somewhat	_____	29

QUESTION 13 (Page 8)

How far do your parents	High School	_____	136
expect you to go in school?	Beyond H. S.	_____	104
	Not finish H.S.	_____	3
	Do not know	_____	24

EMPLOYMENT SITUATION

QUESTION 1 (Page 9)

In view of the present
situation the government
should:

	<u>TOTAL</u>
Increase Employment	
Insurance _____	25
Extend Social	
Assistance _____	44
Have more retraining	
Programs _____	118
Individual should look	
after himself _____	68
Create more jobs _____	5

QUESTION 2 (Page 9)

Who is responsible for
finding you a job?

Industry _____	4
Government _____	19
Individual _____	208
School _____	31
Other _____	8

QUESTION 3 (Page 9)

Do you think education will
guarantee you a job?

Yes _____	96
No _____	93
Do not know _____	75

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